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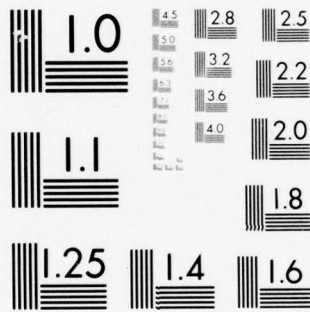
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Program Management Course Student Study Program

Recombining and Co-locating
The Engineering Support
and Project Management
Functions of Naval Ship
Acquisition,
An Overview and Attitude Study
PMC 73-2

Mark Erik Steiner
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Fort Belvoir, Virginia 22060

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DEFENSE SYSTEMS MANAGEMENT SCHOOL

STUDY TITLE:

Recombining and Co-Locating the Engineering Support Project Management Functions of Naval Ship Acquisition; An Overview and Attitude Study.

STUDY PROBLEM/QUESTION:

1. To trace the reasons for the original split of the old Bureau of Shipbuilding the problems thereby created and corrective actions planned.
2. To determine the attitudes of NAVSHIPS and NAVSEC personnel to the combination and co-location of the two commands.

STUDY REPORT ABSTRACT:

During the fall of 1965 the design and engineering functions of the Bureau of Shipbuilding were separated from the parent command and established as a "field" activity. This study is a chronology of the events behind this split, how operational problems grew for the divided commands and what actions are planned to alleviating these problems along with reducing man power.

Of greater importance is the analysis of a multi-part questionnaire sent to 108 project management and/or engineering support personnel involved, to determine their attitudes toward combination and co-location of the two commands.

The major impact of this study is to add to the information available to the planners of such an action.

KEY WORDS: MATERIEL ACQUISITION SHIPS PROJECT MANAGEMENT
ENGINEERING DATA

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Date
21 November 1973

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Recombining and Co-locating
The Engineering Support
and Project Management
Functions of Naval Ship
Acquisition;

An Overview and Attitude Study

An Executive Summary

of a

Study Report

By

Mark Erik Steiner

GS-13 Navy Dept.

21 November, 1973

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DEDICATION

To my new son Jason who in his short life of just one week has totally reoriented my values and outlook on life. Any action or work can be accomplished for it is all trivial when compared to life itself.

ACKNOWLEDGEMENTS

Few contributed to this study. George Giacoppe helped with advice and review. Jeff Cornwall contributed names of authors on associated subjects which time did not allow me to explore. At NAVSHIPS Brian Sanders allowed me access to his files and Ambrose Klotz reviewed my questionnaire and contributed an unpublished discussion paper for background. Lucinda Quilter collected all my questionnaire responses.

But most of all my wife Linda allowed me the time to finish this paper and supported me even though our whole household was going through extreme pressure and anxiety at the time, due to the illness of our new born son. Last but not least Mark II and Lisa "left Daddy alone while he was writing!"

Steiner's Law

Once turmoil is organized reorganization to
turmoil soon follows

M. E. Steiner

17 November, 1973

Recombining and Co-locating
The Engineering Support
and Project Management
Functions of Naval Ship
Acquisition,

An Overview and Attitude Study

Study Report

Presented to the Faculty

of the

Defense Systems Management School
in Partial Fulfillment of
the Program Management
Course

Class 73-2

by

Mark Erik Steiner

GS-13 Navy Dept.

21 November, 1973

EXECUTIVE SUMMARY

This paper represents both a research paper and a study.

It deals with the subject of how the organization responsible for design, construction and repair of all the ships in the U.S. Navy became organizationally and physically split from its own engineering and equipment procuring divisions and what affects recombining and co-location may have on the personnel involved.

It is a profile on how a large organization can be forced into attacking a major problem (avoiding the loss of billets) in a stop gap manner which, when implemented eventually arrived at totally unsatisfactory results. Change and the lack of a total system approach (caused primarily by external pressures cutting off alternatives) to the original problem caused the unsatisfactory results. This paper is an effort to avoid similar problems during the undoing of the original solution. In this regard the author has chosen to study the social impact of recombination and relocation on the personnel now divided. Admittedly this is only one small portion of the system but it is a start at a total system approach which may assist the planners in their effort to correct the technical problems created by the original separation.

The research is based on a file search of documents pertaining to the original reorganization and proceeds through to the decision

to recombine and co-locate. It basically sets the environment and thinking of the decision makers involved.

The study is based on a questionnaire which was distributed to 108 of the personnel on both sides of the split (54 each) with a 55% response rate.

The paper addresses the following questions:

1. What lead to the original decisions to "split" the organization and how the eventual problems evolved.
2. What are the attitudes of the personnel involved toward combination and co-location of the now divided organization.

The major impact of the study is to bring to the attention of higher management the fact that the combination and co-location should be handled as a total system with the psycho-social subsystem addressed. Such action could offset the adverse effects of the combination and co-location and actually have beneficial results.

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Chapter I

Introduction and Purpose

A. Purpose

The fundamental purpose of this paper is to determine the general attitudes of the project and engineering personnel in NAVSHIPS and NAVSEC to the anticipated combination and co-location of the two commands.

People are the fundamental resources of an organization whose primary functions are management and engineering. The Naval Ship Systems Command and Naval Ship Engineering Center are such organizations. As a resource, the personnel who compose the "operational forces" of these organizations must be kept at peak performance. Many actions are taken to keep these people technically competent and good or bad these will not be addressed here. What is addressed is how actions to keep personnel and improve their organizational and physical relationships may affect the basic job attitudes of the personnel. As one of these people involved I have no charter to change anything but I have received indications that this paper will be well received. My time and resources are limited therefore I will limit myself to highlighting areas of further consid-

This study represents the views, conclusions and recommendations of the author and does not necessarily reflect the official opinion of the Defense Systems Management School nor the Department of Defense.

eration, study and possible interest, with the changes left to others.

I can only hope that I can open unexplored avenues that lead to meaningful results, thus avoiding future problems and headaches.

B. Definitions

The terms used within this study will be commonly used and defined terms with the exception of the following:

- i. NAVSHIPS (Naval Ship Systems Command)-responsible for ship acquisition, repair, overhaul, nuclear propulsion and shipboard components for the U.S. Navy.
- ii. NAVSEC (Naval Ship Engineering Center)-provides engineering and material management support on a customer funded basis.
- iii. Combination - external and internal reorganization of NAVSHIPS and NAVSEC into a single command within NAVSHIPS with the elimination of dual administrative functions.
- iv. Co-location - the physical moving of NAVSEC into the National Center Complex where NAVSHIPS is presently located.
- v. Psycho-social - Individuals in social relationships.
- vi. Organizational Development - formal and informal processes which have the overriding objective of improving

organizational effectiveness and efficiency by means of parallel improvements in individuals and small groups.

C. Limitations

The basic limitation of this paper is the lack of ability of the author, which resulted in a questionnaire (see Appendix 1) filled with inadequacies. The most glaring of these is the fact that I make reference to only co-location in the questionnaire without definition of what was meant. This made questions keyed to combination ambiguous to those respondents who did not assume that it was included in co-location.

Major limitations on the entire paper are:

- i. Only civilian personnel in project management offices or engineering support offices in NAVSHIPS and NAVSEC were given questionnaires. No responses from anyone below the grade of GS-12 were received with the majority being GS-14's or above. Therefore application of the results to other divisions (i.e. Administrative, Contracting), occupational areas (i.e. clerical, accounting) or military personnel would have to be tempered.
- ii. Though the personnel in question are managers and/or engineers they are in a special category as government employees, working at the seat of government, for NAVSHIPS

and NAVSEC, in an urban environment, on the East Coast, etc. All these factors would make the use of results contained herein of questionable value outside of its environment.

- iii. The size of the organization also has an effect on results. The total NAVSHIPS/NAVSEC employment is 3431 with 1666 in NAVSHIPS Project Offices and NAVSEC Engineering Support Codes (includes Clerical, Secretarial, etc.)
- iv. Also of note is the time frame involved. There is no way of determining the effects of "Watergate", the Middle East, the Fall Season, a non-election year, the October pay raise, budget submissions, no FY-74 budget approval, etc. on the attitudes of the personnel involved.
- v. Another critical limitation on the scope of the study is the lack of time to analyze the data collected. There may be valuable keys to general employee attitudes available in the data collected that has been left uncovered. The data is available for further study if such is desired.

This paper is so specific that it is much easier to say that it should only be used outside of its intended purposes with the greatest of care.

D. Organization

This paper is organized by major research questions (see paragraph F below) in an effort to maintain a logical flow and to allow separate use of the sections. In doing this the paper also follows the actual patterns of research followed, with the file search, questionnaires and analysis functions each contributing in order.

The questionnaire will be handled a question at a time in an effort to recreate the attitudes of the respondents basically to the co-location of NAVSHIPS and NAVSEC but also in greater depth where possible. Salient and repeated comments by respondents will be covered as appropriate during the analysis of the question and in the survey of attitudes after coverage of the questions.

E. Fundamental Technique/Hypothesis¹⁻³

My basic hypothesis will be that there is no significant polarity or single group opinion among the managerial and/or engineering community in NAVSHIPS/NAVSEC. In order to accept or reject this hypothesis, I will use an $\alpha \leq .01$ criteria in the Kolmogorov - Smirnov one sample test for most elements of the questionnaire. This technique should eliminate doubts in the level of confidence (99%) and it should also help detect the areas of importance. Much of the analysis will be readily apparent from

the data, but using such a technique as indicated here will help establish attitude priorities.

Analysis of the data by itself will contribute little to the situation at hand. How the data is synthesized and how the information gained is put together and used is the key to a successful product. In many cases stopping a counter productive action is as beneficial as creating a productive action.

F. Research Questions:

The major research questions that form the basis of this paper are:

1. What circumstances, events and/or conditions lead to the original division of the managerial and engineering functions of the old Bureau of Ship Building, the problems encountered and actions initiated to correct those problems.
2. What are the basic attitudes of the employees involved toward combination and co-location of the two commands formed by the original split?

Question 2 deals with the personal as well as job related attitudes affects and will touch the "hygiene" (physical, Physiological, anatomical, etc.) as well as a "motivational" (achievement, recognition

work itself, responsibility, advancement, etc.) factors involved.⁴

This paper will describe the basic situation, how it arose, and the psycho-social impact the planned solutions will have on those involved. It has not been presumed what the attitudes "should" be, because this paper only seeks to bring to the fore trade-offs that may be being made without full realization and/or clarity assumptions that have been made or attitudes arrived at, without data to go on. I will not over extend this paper into giving detailed solutions as I originally planned for my resources proved inadequate to the task of gathering all the information necessary. I do not want to fall into the trap of creating solutions without knowing the total system involved. I will have to be satisfied with contributing a little extra information on to those who are tasked with the responsibility of creating the final plans to be implemented.

Chapter II

Review of Related Research

Because of the detailed and limited nature of my research questions, review of specific literature and research was brief. Works by the major researchers in the field of organizational behavior, while interesting, were not significant in contributing to this study, for in all cases the environment and/or people involved were entirely different. In-house studies have been performed by NAVSHIPS/NAVSEC but they were predominately organizational and based on working efficiency. For that reason, and the sensitivity of the studies and information contained therein they were not used in this paper. Though not used directly in this paper, two studies are considered worth citing for further information for those interested. The first;

1. Part I of an unpublished staff paper Decision Paper: Functional Cognizance of Ship Electronics dated December 1971.

This study, written by Mr. A. Klotz, (then NAVSHIPS OIP) and titled "The Historical Perspective of NAVSEC Mission and Staffing" (Appendix 4) gives further insight into the manpower and funding problems that lead to the original division of BUSHIPS and the mission of NAVSEC. Manpower and funding graphs are included for clarity.

The second;

2. Report on Personal Goals Session by Mr. I. Wanless dated April 20, 1973. (NAVSHIPS Memo 09D:IJW: may Ser 16-09D of 20 April, 1973).

This study seeks to identify "...factors which inhibit development of Pride, Professionalism and Motivation..." and "...to reach agreement on priorities...". It uses a technique developed by Mr. John T. Hall, National Bureau of Standards. "The technique involves four discussion areas (Objectives, Communications, Supervision, Productivity), four recorders, and , in this case, 27 attendees. The attendees moved from area to area in a pre-determined pattern, at 12-minute intervals, through eight periods." The result of this session should be of great interest to those involved with organizing NAVSHIPS personnel.

While reviewing the above mentioned studies and reading organizational psychology literature I decided that this paper would be done independently and with no fixed attitudes in an effort to add information on and not to confirm anything previously thought or done.

Chapter III

Data Collection and Analysis

Methods Used to Collect Data

For the basic background and history that went into Chapter IV, and what lead up to the present situation, I relied almost totally on the files held at NAVSHIPS. Conversations and informal interviews with NAVSHIPS employees, in knowledgeable positions and employed over the time period in question, also contributed.

The file search was systematically done covering a year at a time with notes compiled to create the chronology given in Chapter IV. Care was taken to remain on the subject of dividing influences though many other topics arose that would have been interesting to follow.

Toward the close of the file search I developed the questionnaire used to determine employee attitudes.

The questionnaire (Appendix 1) was developed based on Herzberg's "motivators" with certain questions included to determine "hygiene" factors not satisfied. Each question allowed for comments. This allowed some interpretation to reduce bias and permitted the discovery of unexpected bias or misunderstandings of the respondents. Unlike common testing practice and much to the concern of my study adviser, Major George N. Giacoppe (USA), an odd number of choices were

allowed. I did not want to exclude apathy as one of the possible attitudes prevailing. By allowing a middle-of-the-road, non-committed answer this could be brought out. By forcing the respondent to commit himself one way or the other I would never find out. I weighed the shortcomings of my questionnaire in this regard and went with the odd choices realizing I would be losing some of the underlying attitudes that would be uncovered when a choice must be made. The polarity of the questions was reversed from time to time to insure that the respondent actually read the question and understood the alternatives available. This was done to avoid the situation where a respondent would automatically proceed to complete several portions of the questionnaire at the same level as the first few questions. Due to the specific nature of the content of certain questions the format of the questionnaire was modified to suit the need.

The questionnaires were randomly distributed by hand. Only project offices and engineering codes were entered and professionals handed the questionnaires. 108 questionnaires were distributed in this manner (I asked for 110 to be reproduced but only received 108). Respondents were asked to return the filled in questionnaires to my office by internal mail or by hand. No names, offices or any other identification was required except grade level and years with

the Navy. The latter information was requested so that users of the data gathered could get a better insight into the respondents and the value of and limitations on the data. The "code" numbers and quantities distributed in each code will not be stated in this paper nor was that data even recorded. These measures were taken to insure the security of responses and to support the non-attribution policy.

No questionnaires received after November 6, 1973 are included in the tabulations. The "cut off" was established in order to allow time to develop cumulative calculations.

The questionnaire was not pre-tested but was reviewed by officials at DSMS and NAVSHIPS for content and format. Also impartial and unbiased people were used to determine the clarity of the questions.

Methods Used to Analyze Data

A question-by-question analysis of each questionnaire was performed to interpret acceptance or rejection. Multiple responses to the same question were interpreted as describing the mean of the indicated responses. In only one case were responses made on the lines. In this case the answers meant were readily discernable from the comments given or the extreme positions of the responses. Any impact would be slight because the cumulative data was grouped

to conduct the calculations for hypothesis testing.

Questions I and II were purposely placed at the end of the questionnaire so as not to prejudice the respondents and their answers to other questions. Question 16 served a two fold purpose in identifying respondents from NAVSEC. The request for Grade, years with the Navy and other demographic data was added to establish a profile of the respondents and further define the limitations of the results.

The data was analyzed mainly through the Kolmogorov - Smirnov test except for part of question 17 which was meant to uncover physical "hygiene" factors that if given attention could possibly be changed and adverse affects diminished. One mention of a reasonably correctable problem should be all that is necessary in such a case.

Appendix 1 displays one questionnaire which contains raw data used directly in the analysis. Appendices 2 and 3 show how the data was cumulated and the methods used for testing the "null" hypothesis respectively.

Chapter IV

Major Research Question (1)

A. File Search and History

During the summer of 1964 there was much discussion in Washington, D. C. about the size of the "headquarters" of the various executive departments located there. Many studies were done to determine what is a headquarters, asking such questions as what activities:

- i. must be at the seat of government.
- ii. are specified by law to be at the seat of government.
- iii. have strong custom, tradition or other good reasons for being at the seat of government.
- iv. would be inefficient and ineffective (cost, travel, time, working ties, etc.) outside of a Washington, D. C. "headquarters".

In the fall of 1964 fearing the loss of as many as one-half of the Bureau of Shipbuilding's (BUSHIPS) employees, the Chief of Naval Material (CNM) requested a report from BUSHIPS indicating what functions and personnel could be moved out of BUSHIPS to a "field" activity. The required response time was 3 weeks but BUSHIPS' manpower and planning division had anticipated the action and was ready. On October 23, 1964 the initial BUSHIPS

plan was submitted. This plan essentially indicated that as long as this would be a "paper" reorganization (all the personnel would remain where they were) the management and administrative functions of the Bureau could be separated from the technical and material management functions with the minimum of disruption. This action would eliminate approximately 50% of the headquarter's billets (see Appendix 4).

For the next 6 months the idea was massaged with Navy⁵⁻⁸ and BUSHIPS to establish the hows and guidelines for such action. Other Navy Headquarters Commands, i.e. Bureau of Weapons (BUWEPS) were also moving in the same direction.

On May 28, 1965⁹ BUSHIPS formally requested the establishment of the Naval Ship Engineering Support Activity (NAVSESA) as a "shore (field) activity of the Naval Material Support Establishment" with primary support responsibilities to BUSHIPS. NAVSESA's stated mission was "to perform assigned engineering and material management functions for ship systems, equipment and material requirements in support of the Bureau of Ships." The letter went on to indicate that the personnel would be from BUSHIPS and that the activity was to be "co-located with the Bureau headquarters". The requested effective date was July 1, 1965. The Chief of Naval Material (CNM) endorsed¹⁰ the letter with minor changes and sent it on to the Chief

Of Naval Operations (CNO) to obtain the Secretary of the Navy's approval.

During the same time frame BUWEPS was taking similar actions¹¹ to establish the Naval Weapons Support Activity (NAVWSA). The major difference, with the NAVSHIPS Plan, being that the hierarchy of NAVWSA would be the same as BUWEPS and that no internal changes at all would take place in operations. The only action would be in name and for separate record keeping.

The only person "double-hatted" in the NAVSESA hierarchy was to be the commander who would also be head of BUSHIPS' Engineering Division. Actual but minor reorganizations would take place.

On July 14, 1965 NAVSESA was officially approved¹² under the same guidelines as the BUSHIPS request mentioned above.

The BUSHIPS machinery started rolling and by July 21, 1965 a task group to prepare a "detailed plan" providing for establishment and operation of NAVSESA was formed.¹³⁻¹⁴ NAVSESA was to be established "in-place" and fully operational. Future problems were recognized by the inclusion of the following:

"There is no plan for relocation of any part thereof outside the National Capitol Region. However, due to a critical shortage of space anticipated for the buildings (Main Navy), it is necessary to plan for the relocation of limited selected positions of the NAVSESA to sites outside the Main Navy - Munitions Complex, but within the NCR".

The plan was arrived at by September 16, 1965¹⁴ and became known to all personnel in early October, 1965¹⁵ with October 24 set as the effective date. NAVSESA was described as "The field activity will become the Bureau's central design and engineering functional organization." The major reasons given were as follows:

- i. Separate technical and project and program management rolls to improve technical proficiency and responsiveness.
- ii. Take advantage of the greater flexibility in ceiling and funds available to field activities.

Of special note is that on October 5, 1965 an internal memo highlighted the feeling of separation that many of the NAVSESA people would grow to have, and recommended a change to the proposed name of the activity as follows:

"...recommend change NAVSESA to NAVSEC.

The intention, now, is that this activity will become the Bureau's central design and engineering functional organization. In due time we will forget that we were once a part of the Bureau and will have to stand on our own feet as an engineering center. Why then include the weak sounding word "Support"? Further, the term "Activity" does not suggest design or engineering functions. It connotes a conglomeration of functions for which no proper collective noun is suitable."

During the period from November 1965 through January 1966 the design and engineering functions and personnel of BUSHIPS were

transferred to NAVSESA, this included the conceptual design function nor originally contemplated. This latter change required a memo¹⁶ to advise CNM but that was all.

One of the first signs of separation was the establishment of a formal work assignment system¹⁷ to "get a handle on the bulk of the work" to allow for organizing and planning. This system "recognized" the need for many informal and unplanned assignments and did not discourage them.

During the period of establishment many bugs in the operation were worked out. Some examples are:

- i. Funding and Accounting Procedures¹⁸
- ii. What engineering functions would remain in Headquarters.¹⁹
- iii. Internal NAVSHIPS reassignments to accommodate change and later transfers.²⁰⁻²¹
- iv. Civilian employment levels.²²⁻²³

On October 29, 1965 an official request²⁴ was forwarded to CNO via CNM to change NAVSESA's title to Naval Ship Engineering Center (NAVSEC) for the reasons stated above¹⁶ and the "negative effect on personnel" because the present title suggests a less responsible role. The approval document was never located in the files,²⁵ but the title, NAVSEC, was first used in official correspondence soon after.²⁶ This memo was essentially an explanation of the new name

and a pep-talk on the whole reorganization for the people involved.

A new interesting viewpoint also appeared in this memo.

"Attainment of the above objectives is mandatory if we are to do the job required by the intensified project management within DOD."

Additional official use of the title soon followed.²² The title was officially changed on December 14, 1965.²¹

Still more formalization of the relationship occurred on December 20, 1965²⁷ when, because of the "continuing problem of relating manpower resources to specific work effort," a restructuring of the work control system was established. This new system had the following features:

- "a. Establish formal work ordering techniques covering all tasks laid upon NAVSEC by the Bureau and other external sources.
- b. Develop priorities - schedule work.
- c. Identification of work assignments and manpower required to perform the tasks.
- d. Control internal control of the total NAVSEC workload to support management analysis of NAVSEC's total manpower requirements.
- e. Internal scheduling and progress reporting to permit the orderly completion of accepted work in accordance with assigned priorities and completion dates.
- f. The formal identification and analysis of the manpower required to support those functions and responsibilities which in the aggregate, may require a significant use of manpower, but whose quantitative impact otherwise cannot be recognized.
- g. The development of early advice to the Bureau and other customers of the need to seek alternative methods to accomplishment for those tasks which cannot be accepted by NAVSEC for lack of manpower or other resources.

h. The establishment of work forecasting methods which will permit the Bureau and other customers to issue early advise to NAVSEC of forthcoming changes in requirements for engineering services which are commensurate with program planning of future fiscal years."

As can be seen this new system goes a long way to establishing the separate status of NAVSEC. Note the "other external sources" included.

For those interested in reading how the creation of NAVSEC was viewed during the actual time frame, a speech by RADM Brockett to the Pacific Fleet Maintenance Conference of December 15, 1965 is included as Appendix 5.

During 1966 many NAVSEC internal re-organizations were taking place²⁸⁻²⁹ along with more BUSHIPS/NAVSEC transfers.³⁰⁻³² Also many field activities outside of the Capitol area were re-assigned to NAVSEC as "field" divisions.³³⁻³⁹

By April 28, 1966 NAVSEC had its own official written correspondence procedures⁴⁰ separate from NAVSHIPS and using NAVSEC letterheads. The procedures also included messages. Now BUSHIPS and NAVSEC were separate to the outside world.

Not only were external ties being formalized for NAVSEC but on July 6, 1966 a long detailed internal work control system, based on the December 20, 1965 external system, was implemented.⁴¹

The first physical relocation of NAVSEC personnel started in August 1966,⁴² when the lack of space in the Main Navy Building "dictated" the need to move part of the Material Control Division to Bethesda, Maryland. The space problem was growing daily with State Department and Army as well as Navy personnel occupying the Main Navy and Munitions Buildings Complex. CNM was also pushing to have more space so that the total Material Command could be moved into Main Navy in the 1967 - 1968 time frame (NAVSHIPS, NAVAIR, NAVORD, NAVFAC, etc.). There would be little room for "field" activities.

It should be noted that on May 1, 1966 BUSHIPS and BUWEPS were split into NAVSHIPS, NAVELEX, NAVAIR and NAVORD for functional and political reasons. The Navy considered these as field activities of the Navy Material Command Headquarters (though Congress still considered them as headquarters). NAVAIR took advantage of its field activity status and assimilated NAVWSA into itself. NAVSHIPS wanting the flexibility of two facilities, knowing Congress' attitude, and for the personal reasons of those in decision making positions did not take the same action with regard to NAVSEC.

During this whole period much juggling of ceiling points between NAVSHIPS and NAVSEC took place. Ceiling points were moved to NAVSEC while the people remained at NAVSHIPS, etc. A scare took place during October 1966 when rumor had NAVSEC relocating to the

Federal Building in Baltimore, Maryland. This move was challenged on the basis that too many people would be lost in such a move.⁴³ The need for the move due to lack of space was still considered great.

In 1967 NAVSEC moved away from OM&N funding to customer funding. Work loading systems were tightened up to fully accommodate this change. Such a system of funding also facilitated the control of project funds now required.

Formal announcement of the pending relocation of NAVSEC from the Main Navy building to the Center Building, Prince George's Center, Hyattsville, Maryland was made on November 7, 1968.⁴⁴⁻⁴⁵ No date was given but trial "split operations" for administrative support to make NAVSEC more self-sufficient were planned for.

It took until February 6, 1969 to firm-up the relocation, but the effective date February 24, 1969 and the new address:

Commander
Naval Ship Engineering Center
Center Building
Prince George's Center
Hyattsville, Maryland 20782

was given to CNO then.⁴⁶

The relocation of course called for a tightening up of the work load system which came on March 6, 1969.⁴⁷

To make matters worse no external update of the NAVSEC organizational manual took place from 1966 - 1969. Many internal changes took place during this period and those outside of NAVSEC, including NAVSHIPS, were unable to track functions and expertise. This administrative problem caused there to be a considerable loss of communications, working relationships and knowledge.

To help the above situation, control workloads and be responsive to NAVSHIPS' projects (and the NAVSHIPS Project Directive System for tying funds to Projects) NAVSEC established internal secondary managers.⁴⁸

During 1970 the personnel of NAVSHIPS were put through the ordeal of working in a building being torn down. The President had decided that the Navy Buildings on the Mall had to be removed and removed quickly. In the process, the wrecking started at one end and since NAVSHIPS planned to leave last a continuous movement of rooms away from the wrecking and filling of spaces left by others ensued. Not only were the NAVSHIPS personnel continuously moving about the old building but so were the rats and roaches until all were occupying the same spaces. When the move to the "new" building at the National Center in Arlington, Virginia finally took place morale worsened. The building moved into was unfinished. The elevators were (and are still) continuously in need of repair

(people trapped for hours, falling many floors, having to crawl out, etc.). Inadequate parking and street facilities caused continuous traffic jams and long delays, etc.

In summary the chaos of 1970 did little to help the growing problems between NAVSHIPS and NAVSEC. Many NAVSEC employees watching the chaos felt glad their move went so well and that their building and surroundings were so nice. Many NAVSHIPS employees became resentful of the way they were being treated.

Over the entire period from 1966 on, minor conflicts between NAVSHIPS and NAVSEC have existed (i.e. letter policies, organization, reduction-in-force policies, mission, etc.). This fact coupled with the steady decline of communications created by organization changes, formalized workloading, distance/time, and the loss of old working relationships (people leaving positions or dying, ending the first name relationships and phone call or visit responses), caused the hierarchy to take a deep look at the practicality of maintaining divided management and engineering expertise. Tasking had progressed from informal conversation through 1 paragraph written tasks to multi-page Ship Project Directives specifying funds and tasks, while the understanding of the tasks and usefulness of the results steadily decreased. The time required for responses greatly increased.

The first written indication that NAVSEC and NAVSHIPS might be again co-located appeared on April 20, 1971 in a letter to NAVMAT⁴⁹ which concluded a staffing statement with the fact that there was no desirable way to split NAVSEC. It would all have to be moved or none of it.

A furor soon started as rumors spread. Many NAVSEC employees liked where they were and felt that they should be left alone. Many argued that for all its faults the separation did allow the engineers to work in peace without the managers on their backs and that the results were really better. Before long Rep. Lawrence J. Hogan of Maryland became involved because his district would be losing beneficial people and receiving nothing in return. This ended with a letter from Frank Sanders ASN (I&L) to Rep. Hogan dated May 21, 1971⁵⁰ in which it was stated that there would be no move because tenants to fill the Center Building could not be found and that only minor transfers in both directions would take place. This letter was followed by meetings between representatives of the Navy and Rep. Hogan's office in which agreements were reached.

On June 16, 1971 formal instructions were issued⁵¹ to clarify that work charged to NAVSEC's customers would be of a technical nature only. Funding and Accounting Policy and Procedures for the engineering effort of NAVSEC were re-established.

NAVSEC's mission and responsibilities were re-stated on July 1, 1971.⁵²

During this time 50 people were scheduled to be moved to NAVSHIPS from NAVSEC to provide Fleet Support Functions.

Congressman Hogan was informed of this action beforehand.

The situation did not improve and reductions of personnel throughout the Department of Defense and grade level reduction efforts made matters worse, lowering morale further. On July 18, 1972⁵³ VCNO requested CNM to provide plans for the amalgamation of NAVSHIPS and NAVSEC. In reply to CNM, NAVSHIPS stated that it was "proceeding with plans for co-location ASAP."⁵⁴ In the background provided, the following reasons were given:

- i. Many manhours lost in travel.
- ii. Communications problems exist in improving fleet support and productivity of the commands.
- iii. Essential to meeting the manpower reductions required over the next 3 years.

The memo concluded by requesting support in finding the space to relocate NAVSEC in the National Center Complex and in finding replacements for the Center Building.

Much planning has been done during the last year but few results have been forthcoming. The major hurdles of getting the basic concept approved has yet to be completed. At present

the decision rests with the Secretary of the Navy. The plan now is to move NAVSEC into a new building presently completed at National Center, but still vacant. Funds will be required to rent this space at a time when no more renting is supposed to take place. What replacements there are for the Center Building could not be determined. NAVFAC would be a strong choice for they must move but no details are available at this time. Many plans for reorganization exist but none as yet have been approved and decisions are held, pending final approval of the major co-location question. Further detail would be politically sensitive and add nothing to this paper.

As part of the environment to these problems it should be noted that the complexity and costs of Navy ships has greatly increased in the last eight years and that the manpower available has been decreasing steadily.

B. Summary and Conclusion

It is evident from the records reviewed that the Bureau of Shipbuilding was a victim of circumstances almost beyond the control of its management. By taking stop gap measures, within guidance and constraints, to save billets and avoid political problems the organization was divided. This was not bad at first but soon space was scarce and one portion was a field activity, so it was moved. Seperate administrative support, formalized tasking procedures and the breaking of

old ties soon started to take their toll. The gap widened with the "field" activity soon thinking it was independent and the "headquarters" reorganizing to do much of its work in house to avoid delays. Extra coordinators were added and more formalized tasking procedures added.

The original reason for dividing soon became lost in deeper operational problems and the arguments for "hiding" the billets themselves became trivial in view of massive manpower cuts called for by the administration.

It soon became evident that to meet manpower reduction and regain much of the lost efficiency of the organizations recombination and co-location is required.

There is no need to examine the need for action. The situation at present can't be left to exist. A technical organization cannot separate its project management and engineering support functions and hope to operate efficiently. This has been shown to be true in private industry as well (Litton Industries). In cases where organizations have successfully split it was always as self sufficient entities containing duplication of all necessary functional groups. Also the duplication of administrative and other functions wastes critical manpower at a time when constraints are tight.

It must be concluded that any actions taken now must be well planned, with contingencies, taking the total system and possible changes into account. Stop gap measures should be avoided as much as possible (the consequences can be vividly seen in this history). If outside constraints make a situation impossible, those imposing the constraints must be notified, with the reasons why.

Money, people, time and other resources in the Department of Defense and the Navy are too scarce to allow inefficiencies in any area including our planning. Anything less than a total systems approach to this problem (including the psycho-social subsystem) would be inefficient in its results.

Chapter V

Major Research Question (2)

Attitudes of Employees to Co-location

- A. The job itself (type, satisfaction, goals, recognition, level of interest, responsibilities)

The first nine questions (Section A) of the questionnaire, Appendix 1, try to uncover facts about the actual job performed, how it is approached by the respondent and what effects he thinks co-location will have on the work itself.

1. Question one is concerned with the general level of job satisfaction on the present job. I intended to gain data with which to analyze individual responses to the rest of the questionnaire. The results however indicated something specific in themselves. A large majority of respondents indicated satisfaction with their present jobs (39 out of 59) with only 8 out of 59 indicating any degree of dissatisfaction. This is extremely important for changes to an entire system with such a high degree of job satisfaction must be very delicate so as not to disturb a good thing. Realizing that over half of the respondents were above the grade of GS-14 one may say of course these employees are satisfied, but the ratios of replies were the same for GS-13's and below. (Nor was there much variation between NAVSHIPS and NAVSEC respondents).

The personnel we are dealing with are highly skilled engineers and managers who are involved in work which by their own evaluation is satisfying. This, again, is a significant point. Of the written comments received most were from those on the border line between satisfaction and dissatisfaction or dissatisfied. These comments dealt with the needs of individual freedom, more work, and better organization. From this it can be interpreted that again the work was not a problem but how the individual was allowed to do the work. If those planning the coordination and co-location do not keep this situation in mind the high level of job satisfaction now enjoyed can be damaged even though the work to be done itself remains unchanged.

2. Question two deals with how co-location will affect job satisfaction. In this case, though the answers were more spread out, there were still enough responses in the "no effect" space to cause the null hypothesis to be rejected by a slim margin. The grade level analysis shows little variation in the results but the NAVSHIPS/NAVSEC responses did show a trend. While most NAVSHIPS personnel indicated "no effect", approximately 1/3 indicated that they felt their chances for job satisfaction would be greater after co-location. NAVSEC responses were more evenly spread out (6 "no effect", 10 "less chance", and 9 "greater chance") indicating that there is no general attitude in NAVSEC. In the totals

while 28 out of 59 indicated "no effect" 20 out of 59 were on the greater chance side due to the NAVSHIPS swing.

Because the results do not indicate a negative attitude there appears to be few negative pre-conceived notions that have to be over come. This is a good situation and should be cultivated by the planners. Again the limitations of the questionnaire should not be lost. The respondents were a special group of employees, but also an important group. Most comments received were from those who felt that co-location would increase the chances of job satisfaction, both for NAVSHIPS and NAVSEC employees. Almost all of these indicated the main reason would be the improved communications. (Of note may be one NAVSEC response which indicated that the atmosphere at NAVSHIPS was more professional!?)

3. Question three, four and five all deal with the topic of project orientation versus functional orientation of jobs.

Question three asks the direct question "How much project orientation would you prefer in your job?" The results were extremely in favor of total project orientation and was consistent for all grade levels, years of service and by command (though NAVSEC total responses less so). Only two comments were made

on this question, but both are worth noting:

- i. "Greater functional breeds excessive authority w/o responsibility"
- ii. Project "...exposure (SHAPM or TYPEDESK) provides a broader base of experience and keeps you abreast of all functions within NMC."

This preference for project orientation should have great impact on the combination/co-location planners. This response compiled with the answers to question four indicate a basic thinking and attitude among these type of employees.

Question four determines the degree of project orientation of the respondent's present job. The results indicate, as expected, that the NAVSHIPS respondents were heavily project oriented. The more important factor is that the NAVSEC responses were almost "null" with close to equal numbers in each space. While at first this doesn't seem important closer analysis uncovers an important fact. The questionnaires were distributed among personnel in the NAVSEC engineering codes dealing with "areas" of expertise and not tied to any ship programs. The responses indicate that many of these same personnel, while working in a functional area, consider their job project oriented. Two conclusions can be reached from this fact:

one, the terms functional and project are misinterpreted (highly unlikely among people dealing with these terms extensively).

two, the people so indicating, identify with or actually restrict their work to certain projects.

If the second conclusion is true (and since no comments were received on this question it is highly likely) the combination/co-location planners should note this in their analysis of different organization setups.

Question five tried to determine if the preference for project or functional orientation is based on personnel or job related considerations. It is the only multi-choice question which when analyzed did not reject the null hypothesis. Though the actual numbers favor job related considerations the reasons for preferring total project were diverse enough, over the entire range of "entirely personal" to "entirely job related", that no trend could be considered significant. Obviously the reasons for the total project preference are complicated and totally dependent on the individual, but whatever the reasons, the preference is there and should not be ignored.

4. Question 6 is directed at the affects of co-location on one's ability to achieve job related goals. Here we have another

case where, grade, level, years of service, and command of the respondents does not cause changes in the results. Only five respondents felt that co-location would hinder their "...ability to achieve job related goals." The other 54 were fairly evenly dispersed between "strongly enhance", "enhance" and "no effect". Of the many comments received on this one question those repeated the most were:

- i. greater interaction and communications leading to mutual job related benefits.
- ii. the fear that poor organization would cause the benefits to be lost.

Again we have the situation of extremely positive attitudes about the co-location.

Two extremely negative comments received on this question were so uncharacteristic with the rest that they bear repeating:

1. "I no longer have any job related goals"
2. "...still have the problem of adequate technical competence in SEC whether co-located or in Hyattsville."

While the above two comments were out of the ordinary such attitudes can be extremely counter productive and can have adverse affects no matter how small the numbers are. Efforts should be made to bring people holding such views back on track or get rid of them. This problem though interesting is out of the scope of this paper and will be left to later research or others to follow up on.

5. Question 7 confronts the problem of the affect of co-location on the recognition of achievements. The fact that all but 8 respondents indicated that co-location would have "no effect", with all subcomponents consistent was a surprise. When I originally wrote this question I had assumed that the closer relationship and communication resulting from co-location would spark varying responses on the subject of recognition. The comments received indicate that there is little true recognition now and the amount that there is won't be altered in the future regardless of other changes.

This is a poor situation since recognition is one of Herzberg's principle "motivators". The people we are dealing with are high on any scale of hierarchy (Maslow's, Herzberger's).⁵⁵ Question one indicated a high degree of job satisfaction based on the work itself. An effort to recognize real accomplishments (not a cosmetic effort) should do much to further motivate such people. This factor then is independent of combination/co-location but it should not be lost to those who can effect a change. More effort should be placed in finding adequate solutions to this problem.

6. Question 8 deals with the affect of co-location on the quality of work that will be assigned. The great majority of respondents in all categories indicated "no effect" and no comments were included.

If job satisfaction is high now as indicated in question one above and won't be decreased by co-location as indicated in question two then it is consistent to expect that the same people will indicate that the quality of work (interesting, challenging, etc.) will not change. The results here substantiate and confirm the respondent's answers to previous questions and adds to the general picture of the attitudes being uncovered. One important fact is that no matter what the organization, the work still has to be done by the people involved. It is important to know we are dealing with interesting and challenging work.

7. Question 9 is a disappointment. When asking how co-location would affect the respondent's responsibilities or sense of responsibility I expected a wide variety of results and many comments. "No effect" was the position of the great majority and this position was consistent for all categories of grade level, years of service and command. Only one comment was received and it was from a respondent who felt his responsibility would decrease due to the addition of easily reached people knowledgeable in his area. His lack of confidence may be warranted!

On the whole I have no way of evaluating from my questionnaire what level of responsibility I am dealing with, but if grade level, years in service, influence and intelligence of comments to a

questionnaire are any indication I am dealing with a group of responsible people in responsible positions who don't see a change in their responsibilities due to co-location. Considering the programs and dollars involved at NAVSHIPS/NAVSEC my conjecture is probably a good one. Responsibilities are part of job satisfaction also, so the consistency still holds with regard to questions one and two.

B. Influence Questions ten, eleven and twelve (Section B) of the questionnaire, Appendix 1, all involve attitudes on influence.

1. Question ten is meant to establish the general level of influence the respondents now hold. Forty-eight out of fifty-nine indicated that they are influential (or very influential, 17). This analysis could be fact or just how the respondents view themselves, but considering the grade levels involved I would have to give some creditability to the self analysis. The comments received support this analysis for in every case they indicated a person is as influential as he wants or needs to be. Those are statements of influential people!

2. In reply to question eleven, which asked the importance placed upon being influential, 28 indicated they place a high value on it, while 23 more indicated that they value it. This indicates the important value placed upon influence by the respondents and

may give some insight into why they seeked employment in NAVSHIPS/NAVSEC in Washington. People who place such value on influence and indicate job satisfaction must be influential in their jobs and must remain influential. All comments indicated that to be effective and get their jobs or any job done correctly they must be influential and that is why they value it highly.

3. Question 12 on how co-location will affect the respondents abilities to influence decisions in their related areas met with similar results to questions 8 and 9. 32 out of 59 indicated that there would be "no effect". This was probably due to their present high influence and personalities. There is a slight trend to greater influence in some though, for 22 indicated that co-location would enhance their ability to influence (3 greatly). Comments indicated that increased communications would be the primary cause.

The impact of influence and the need for it should be addressed by combination/co-location planners. The present situation indicates that those involved are influential, feel it is important and don't think that co-location will hurt their influence. Disruption of this situation could cause far reaching repercussions in the organization.

C. Advancement Question 13 concerns itself with the affects of co-location on chances for advancement. Again we have the situation where the majority of responses indicated that the co-location

will have "no effect" on chances of advancement, though over one quarter of the respondents did indicate that they felt their chances for advancement would be strengthened (13 "strengthen", 2 "greatly strengthen"). These results are significant because, in the comments, it is realized that the combination/co-location is particularly needed to reduce the numbers of employees. Therefore the respondents indicate that even though numbers are decreasing their chances for advancement will not be affected, or even increased. One could comment that maybe most of respondents don't consider they have any chance of advancement now and this situation won't be affected by co-location. Such an interpretation cannot be ruled out, but the tenor of responses to the entire questionnaire is not one of people in "dead-end" positions. The comments to this question were along the vein that greater varieties of jobs would be available in a NAVSHIPS/NAVSEC combined organization and this would cancel or outweigh the reduced numbers. These are not the comments of "dead-ended" people. The following comment was very telling "I don't feel threatened by co-location, but rather encouraged". There is no stumbling block to co-location to be found in the respondent's attitude toward chances to advancement.

D. Level of Work In Question 14 respondents were asked to indicate how much of their immediate supervisor's job they felt they

could perform. The results deviated the greatest of any question from the "null" hypothesis. Only one person indicated he could do none of his supervisors job and another indicated he could do very little. 20 respondents indicated that they could do most of the job while 29 indicated they could do all. Comments consisted of "every little bit" and putting checks all the way over in the right hand margin past "all". Only one person felt he should not answer the question. Now, admitting that there are certain facets of the supervisor's job which his subordinate might not have knowledge or comprehension of, it is quite evident that there may be considerable work being done at levels higher than need be. In a time of scarcer and scarcer numbers of people as resources, those available must be used to the utmost. Maybe supervisors are getting too involved in details, re-doing subordinates work or doing it all. This is in-efficient. Also a factor is that expansion of the workload can at times be used as a motivator. The expansion of work creates a chain reaction going up. At the top the net result is not "no work" but more time to manage, plan, supervise properly and make decisions instead of being involved with developing and doing the detailed work. This efficient use of manpower and position should be a goal of the planners. The real solution goes deeper than re-organization but requires a concentrated effort on changing

the values of the supervisors. As such, efforts in this area must, by definition, go farther than physical reorganizations and re-locations. If properly pursued such actions could have obvious far reaching results even to the recognition one feels he receives for his accomplishments (question 7).

E. Overt Actions and Actual Problems Question 15, 16 and 17 get detailed about the actual problems of co-location and whether employees will seek new jobs and/or move their families.

1. Question 15 questions whether the respondent will seek employment outside of NAVSHIPS/NAVSEC when the co-location takes place. Though the substantial majority answered "no" the 10 "yes" and 2 written in "maybe" answers are worth noting. There seems to be little problem with losing this type of employee because of the co-location. The "yeses" and "maybes" were evenly divided between NAVSEC and NAVSHIPS. This was not expected for the NAVSHIPS employees will be disrupted the least. Going further 5 out of the 6 NAVSHIPS employees leaving indicated they will anyway. No reasons were given but the comments were firm that the only barrier to their leaving would be finding other jobs. Most want to leave government employment entirely while others want to leave NAVSHIPS (2 are retiring). Such statistics are not overbearing but may indicate that the real problem in employees leaving is not

one of the co-location but a more basic problem in NAVSHIPS, Navy Department or government service. As such, worry about losing employees in these job areas or planning for the loss due to the co-location should be adjusted. Added information may be contained in the comments to question II below.

The employees leaving were concentrated in the lower grades and as such present a basic problem which is outside the scope of this paper.

2. On the question (16) of whether or not NAVSEC employees will seek to move their families as a result of co-location the responses were 5 yeses out of 24 total respondents. If this ratio holds true, over 20% of NAVSEC employees will seek to move. In this time of short housing and tight money this may pose a considerable problem. Since moves are contemplated and the numbers may be high some effort by management to assist in this area is warranted. While such efforts appear to have no direct affect on combination/co-location, because of replies to previous questions, personal concerns and assistance can only improve the "hygiene" surrounding the job and free the employees involved to be motivated. As a suggestion, maybe an informal group can make some formal arrangements with realitors and banks in the area to assist the moves. Those seeking to move are in the lower grade levels and may need the help.

3. Question 17 was included to determine what problems of a personal or environmental nature concerned employees the most. 21 responses out of 58 total indicated that there were problems of major concern to them. Most of these of course were NAVSEC employees but 32% of the NAVSHIPS employees indicated that they also anticipated problems associated with the co-location. Occurance of these problems could adversely effect the quality of work performed. The converse though according to Herzberg is not true. That is, elimination of such problems will not increase the quality of the work performed it will only allow the quality to reach a "normal" level. "Motivators" as previously mentioned are what can increase the quality above this "normal" level. For those reasons any such "hygiene" problems should be eliminated. They are identifiable and can usually be eliminated by direct actions. Again though, the benefits to be gained should be clear so that not too much is expected. Since many motivators (i.e. interesting work, influence, etc.) already exist elimination of the following problems, with no decrease in the motivators, should yield satisfactory results:

Personal and environmental problems (listed in order of times repeated in response to the question).

- i. Traffic congestion and the lack of access roads in and around the entire Crystal City/National Center Complex.
- ii. Lack of adequate and reasonably priced parking.
- iii. Time lost in commuting and distance to be transversed.
- iv. Poor facilities in National Center. That is appearance of the building, conditions in and around the buildings and overcrowding.
- v. Fear of RIFS
- vi. Continuous re-organizations and movement.
- vii. Too many people involved in the work, constant visits and checks will impede work. Loss of engineering environment and too much politics at National Center.
- viii. Lack of Public Transportation, especially to Maryland.
- ix. Some comments indicated that the co-location would eliminate problems for them that were caused by the original move to Hyattsville.

While many of these problems cannot be effectively altered the test does serve as a target for planners and others associated with the combination and co-location.

This entire section D of the questionnaire contains data which planners must take into consideration. Basically they are:

- i. Very few of the personnel in program offices and support engineers in NAVSHIPS and NAVSEC will seek employment

outside of the commands if co-located. Of those that will most would have regardless.

- ii. A large portion (20%) of NAVSEC employees will move their residences after co-location.
- iii. Certain personal or environmental problems associated with co-location are of major concern to a large portion (37%) of employees.

F. The Basic Question of Co-location Questions 18, 19 and 20 generally elude to the "going in" position of the respondents to co-location. The reason these questions were placed at the end was to avoid prejudging answers to other questions in an effort to be consistent.

1. Question 18 directly asks for the respondent's feelings toward co-location. The total figures indicated that over one-half of those responding strongly approve. The bulk of these strongly favorable responses came from NAVSHIPS. A closer inspection of the NAVSEC figures shows that there is an even distribution with a slight tendency toward polarity (more at the extreme ends) with lower grade (especially those with less than 10 years of seniority) NAVSEC employees indicating the most disapproval as a group. The basic result seems consistent with the previous results where the key points that go into such decisions were favorable. The discrepancies show the impact of "hygiene" factors and possibly fear of

RIF actions. The comments associated with this question were numerous but basically all the same. The co-location is a good idea because the benefits of better and quicker communications would make for a more efficient organization. Even so there may be much confusion, personnel problems and personal problems created. The degree of concern for the latter problems was what caused variations in the responses.

In this case the role of the planners and implementers should be to factually and realistically calm the lack of faith indicated and there-by gain the support needed for such an undertaking.

2. Question 19 was used to determine the basis for reply to question 18. 22 out of 57 respondents indicated that their replies to question 18 were based on entirely job related considerations most of these had previously indicated that they strongly approved of the co-location. Another significant grouping was at the point of equal personal and job related considerations. The same NAVSEC people, with lower grades (equal to or less than GS-13) and less years of service, that indicated strong dissatisfaction for co-location, also indicated that their opinions were based on entirely personal reasons. The comments again indicated that co-location would enhance the performance capabilities of all concerned, but that organizational and personal problems were feared.

3. Question 20 was an add on to determine to what extent the responses given or attitudes revealed were based on factual information. The results were conclusive with only 8 out of 57 respondents considering themselves informed or fully informed. In spite of this glaring lack of information the general results of the questionnaire indicate that the co-location is being perceived favorably. Some bitterness was expressed in the comments accompanying question 20, for example "Personnel in this office at the working level are never informed of anything" (This was from a GS-14 in NAVSHIPS) and "whenever rumors get too strong - the management puts out another meaningless statement". Of importance were statements that while little information has been produced on organization "quite a bit is available on the poor conditions of parking, traffic and physical working environment".

This lack of information along with the realization that information is lacking should be corrected as soon as possible, before it has adverse affects on the attitudes toward co-location. Even worse is the fact that the only information available is about the bad aspects of co-location. If planning is being done adequately, disclosing the facts available, especially how short commings will be overcome, can only have a positive affect on attitudes. Where information is not firm or when it changes this should be indicated

also. It is realized that certain political problems must be overcome first but as soon as it can, the best information available must be officially released and continuously updated. In this way those that have lost faith in the management may regain some of it. Participation is an important part of job motivation and also creates loyalty and commitment. A fully informed employee feels a part of decisions and is more tolerant of hardships he understands the reasons for. The results of this questionnaire shows that the personnel in the areas covered are mature, concerned, and dedicated and should be treated as such.

G. Creditability People will answer questions differently if they believe that what is being discussed is real and also if they believe their answers will be used.

1. Question 1 asked if the respondent believes that the co-location will ever take place. Of the 52 responses only four felt it would not, surprisingly these were split evenly between NAVSHIPS and NAVSEC. The comments given were penetrating indicating that thought had gone into the answers. Most agreed that the main reasons were the reductions in people required and the need for better communications between NAVSHIPS and NAVSEC. Because of this strong result it can be assumed that the responses given to the entire questionnaire represent real thoughtout attitudes

based on the realization that the co-location will eventually take place.

2. Question 2 was disappointing. Only slightly over 26% of the respondents felt that the results of the questionnaire would have any impact on decisions or how the co-location will be executed. Even worse were the accompanying comments. For example:

- i. "No, it lies strictly with the decisions being made by the blue suits - the top key civilians do not have the -----to affect changes and you are too low on the pole to be heard."
- ii. "NAVSHIPS/NAVSEC management rarely listens to opinions from below that are contrary to their preconceived notions."

These are pretty harsh statements especially from people whose attitudes toward the co-location were very open minded. It almost seems as if the question of being heard was so inflammatory that the issue was forgotten and an old wound opened. This appears to be a big rift between management and employees so much so that those responding failed to see that in this case both seem to have similar goals and aspirations. The employees who responded to my questionnaire indicated that they were very concerned about and conscious of the need for the co-location to improve the efficiency

and productivity of NAVSHIPS/NAVSEC. Their lack of faith in management though touched upon slightly did not reflect in their basic attitudes toward their jobs or co-location. I believe honest answers were given all the way through the questionnaire and that the work to be done and personal organizational atmosphere in which it is done seems in this case to be separated in some way. A case where self motivation is high and the work fulfilling but the interaction with heirarchy is poor, especially on a personal, non-work related basis. The recognition question (17) touched on this slightly. This basic hole must be plugged. The combination/co-location cannot do this. They can be handled in a manner that does not make matters worse, but a greater effort is needed.

H. Summary and Conclusion In summary we are dealing with group of people who for the most part are:

- i. satisfied with their present jobs;
- ii. feel that co-location will not effect their job satisfaction (many feel that co-location will actually increase their chances for job satisfaction);
- iii. prefer being totally project oriented for varied personal and job related reasons. Most look at their present jobs as being totally project oriented;
- iv. consider co-location as enhancing their ability to achieve job related goals;

- v. feel that co-location will have no effect on their already poor recognition, interesting and challenging work and high level of responsibility;
- vi. influential with a high value on being influential. The feeling is that this influence will for the most part unaffected by co-location though a large minority look to the co-location as enhancing their influence;
- vii. view their chances of advancement as not being affected by co-location;
- viii. capable, in their eyes, of performing much of their immediate supervisors' job;
- ix. not going to seek employment outside of NAVSHIPS/NAVSEC when co-located;
- x. will not seek to change their residence after co-location, though there are enough who will to require action;
- xi. divided in concern about specific personal or environmental problems associated with co-location. Most are not concerned, but a large percentage are concerned about specific problems;
- xii. strongly approving of the co-location for mostly job related or mixed (personal and job related) reasons; and
- xiii. uninformed about the co-location.

In their minds the co-location will take place and will be done as management sees fit, not based on any inputs from the employees.

As mentioned before the attitudes of these particular types of employees toward co-location are excellent. They don't feel that the co-location will hurt them in their jobs and in many areas feel it will help.

A planner need only concern himself with not hurting this balance, not with improving the situation, in order to make the co-location easier. Of note is the emphasis on total project work, this was strong and should be reflected in the plans.

In a people crunch some emphasis should be placed on expanding the jobs of the people available. This has been indicated as very feasible with the employees we are dealing with because they feel they can do it. Such action may be made to appear as recognition and become a dual motivator. On the subject of recognition, it and the relationship between higher management and employees appear to be major problems. This problem has its roots much deeper than the affects of the co-location. It is a problem that must be addressed and attacked at all levels of the command using some formalized "organizational development" (O.D.) techniques.⁵⁶ Other problems that can be handled by more direct action include housing assistance, traffic, parking, RIF information, etc. as brought out in questions 16 and 17.

I must point out again here that when I originally conceived the idea for this paper I was determined to solve all the people problems associated with the combination/co-location. Once in the middle of the information available and factors (political, technical, organizational, financial, psycho-social, etc.) involved, I soon realized I did not have the time or the resources and skill necessary to undertake meaningful solutions. To guide without being able to even conceive of the total system would be worse than ignoring the entire problem. Therefore I have held myself to what I do best, adding to the total body of information or the entire system involved, so that those who are tasked with the overall planning will have a clearer picture of the system.

This past chapter though rambling and awkward (for that unfortunately is my "style") is the heart of this paper and I believe it contains much information that would be of use to the planners, even if only the detailed problems uncovered in questions 16 and 17. The limitations of the information are numerous though and the reader should keep the narrow scope in mind.

Chapter VI

Summary of Other Major Findings

- A. There were numerous "other findings" that resulted from this paper many of which have already been covered in Chapter V, if they affected the organization. Major examples are, the gap between employee and management and the lack of recognition for job achievements. These findings are not associated with the combination and/or co-location of NAVSHIPS and NAVSEC but go far deeper into the make-up of the organization and the organizational personality.
- B. Over 50% of the respondents were grade GS-14's or above. This was definitely not true of those that received the questionnaire or work in the area canvased. Through the replies were very similar, and the results therefore little effected, there arises the finding that GS-14's and above were more responsive. Why, becomes the bigger question. Were the lower grade employees too busy, apathetic, mistrusting, unfriendly, etc? I will probably never know, but the reasons for this might very well be of value to the commands involved.
- C. When I originally intended to solve "all" the problems uncovered. I started a library search in the areas of alienation and apathy in high skilled managerial and engineering employees.

I uncovered very little. Taking a step further to Eastern Coast, Urban, Government employees in the above category I found nothing. Even more significant is that anything I did find on any one part of my criteria only described the problems, sometimes a little theory on the reasons for the problems, but never how to solve the problems. It is an area wide open for research and, since there are a great deal of employees that fit into this criteria, would be quite useful.

- D. When trying to evaluate the respondents attitudes I was confronted with numerous problems which I could not dig into further without additional information. I could not get this information because of the questionnaire method of survey. In the future I would try to combine questionnaires with interviews so that as interesting avenues were uncovered I could follow them. Such an approach would require considerable support from the management of the organization involved and time and analysis resources on my part. This subject is far too broad for one person with limited time and resources.
- E. Analysis of questionnaires is tedious work which must be done with extreme care. The use of "fitness tests" and

other aids while useful can be misleading. The analysis of total data can yield meaningful results, but many additional factors can be uncovered by analyzing the data received by hand, a piece at a time, especially the comments offered. Use of a computer which I originally envisioned, while it would have been beneficial for compiling and cross referencing data, would have caused me to miss many important facts (i.e. the attitude toward recognition, and the fact that most of the NAVSHIPS employees that will seek employment outside of NAVSHIPS and NAVSEC intend to do so regardless of the co-location.)

I am sure more talented analysts will be able to use my data to uncover many other significant findings invisible to me.

Chapter VII

Summary and Suggestions for Additional Research

A. Summary and Conclusions This paper was a valuable exercise for me to view the organization I work in as a total system.

In uncovering the reasons for the initial division and how it became inefficient it soon became evident that most of the commands actions were done for the best interests of the command and the employees, within a framework of constraints that made the alternatives extremely narrow. The reasons for the breakdown in the divided system were many and were ingrown at the very start. Added people constraints and other outside factors only aggravated the existing situation. Combination and co-location is the most reasonable solution to this considerable problem both for the organization and the people involved.

The major problem then becomes how to perform this combination and co-location in the best possible manner for all concerned and within the constraints imposed on the management (location, budget, numbers of people, etc.). Much planning and information must be incorporated into such an action. The physical, organizational and people problems are many.

Basically the employees involved understand the need for combination and co-location and are actually (as far as my questions and analysis showed) receptive to the idea. Problems were uncovered by the questionnaire which should be addressed by the management planners. These problems cover a range from traffic and parking to the need for possibly expanding the scope of jobs to include portions of each supervisor's tasks. These can be addressed directly and their resolution will contribute to a smoothly run combination and co-location and a better organization. Of greater importance are fundamental problems that appear to be existing independent of the combination and co-location. These problems are the lack of recognition of job related achievements and an apparent chasim that is growing between the working levels and the upper management of the organizations. These are problems that need not exist, for it is quite obvious that the employees in question have goals and standards quite similar to those of the management (and the converse is true). What is most noticeably lacking is the communication between management and employees that makes for understanding of the problems faced by each in reaching their goals. The fundamental problems stated above will require much concentrated, committed and concerned effort and considerable time to solve. Quick results will not be forthcoming, but any earnest actions should yield some

results. Both sides must be made aware and participate in such an effort. Lip service will do nothing!

I personally enjoyed doing this study and value the perceptions I received. The goals of my study were met, but admittedly the scope was narrow. The data contained herein must be seen in context. There are no stereotyped employees, although these employees have some attitudes in common.

B. Suggestions for Additional Studies The most pressing additional studies that should be performed in this area include an expansion of scope to include all the various groupings and types of employees that work in NAVSHIPS and NAVSEC. I have only scratched the surface with what I considered to be the most important group of employees.

Each question in my questionnaire could actually use a study of its own, there are so many facets to explore. As previously mentioned the lack of recognition and the chasim between upper management and working employees primarily need further investigation. Other detailed area studies were brought out in Chapter V (for example; what to do with employees that are totally alienated, why employees prefer a total project orientation and what factors in the work makes an employee be motivated).

An interesting study would be what alternatives may exist to combination and co-location. Maybe there is some way of saving billets and regaining efficiency without performing such a drastic move, though I myself doubt it. An outgrowth of the study could be the effects that distance and various organizational structures have on communications.

On the organizational side, studies into the merits of large versus small project offices and functional support, especially in light of the responses to questions 3, 4 and 5, are in order.

Of deep interest to me would be a total systems analysis of NAVSHIPS and NAVSEC in an effort to determine all the various systems that interplay and go into making up the total command. This should include both the formal and informal interactions between the various systems.

Perhaps the most pertinent question is; How can we best create the most efficient and workable total Naval Material Command System?

But why stop here I am confident that this paper will generate more questions than I have touched on. I have learned more searching for my data than from the results themselves.

As a final statement, no study ends here. After the combination and co-location takes place, and periodically after that, there should

be follow-up questionnaires and interviews to determine how good the data was, where we may be heading, and what changes have taken place due to the actions taken.

C. Implications of this Paper For a change I will try to be brief. The basic implications of this paper are:

1. Some changes in the organizational make-up of NAVSHIPS and NAVSEC is necessary to reduce manpower requirements and to enhance the efficiency of the organizations.
2. The employees involved in the project management and engineering functions of NAVSHIPS and NAVSEC are receptive to co-location of the commands. There are some problems involved which if corrected could make the co-location proceed smoother and action should be taken to correct these. Care should be taken not to deteriorate any of the positive attitudes that now exist.
3. Any actions taken on "implications" 1 and 2 above must be done with the total system in mind so that an optimum solution can be arrived at. Dike plugging is not the answer anymore and if such actions continue, the lack of faith evidenced in parts of the questionnaire may give strength to changing the positive attitudes about the work itself.

4. There are basic problems in the way NAVSHIPS and NAVSEC are managed and organized that have created a chasim between the working employees and management. This basic problem must be fully addressed if major improvements are to be expected.
5. This paper itself is intended for use by the combination and co-location planners. Hopefully it will add to their bulk of knowledge and assist in finding the right courses of action in implementing the correct total plan.

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Appendix 1

The following 20 questions should be answered based on the assumption that NAVSHIPS and NAVSEC will combine and co-locate in the near future. The assumed co-location will be in the National Center Complex, Arlington, Va.

- A 1. How would you describe your current satisfaction with your present job?

FREQUENCY fully satisfied / 10 / 29 / 12 / 6 / 2 / completely dissatisfied

Comments:

2. How great do you believe your chances for job satisfaction will be after the co-location?

FREQUENCY far less / 3 / 8 / 28 / 16 / 4 / far greater

Comments:

3. How much project orientation would you prefer in your job (single total system, SHAPM or TYPEDESK vice General ILS, T&E, Propulsion, etc.)?

FREQUENCY total functional / 1 / 7 / 9 / 10 / 30 / total project

Comments:

4. How project oriented is your present job?

FREQUENCY total functional / 8 / 5 / 7 / 16 / 23 / total project

Comments:

5. To what degree is your answer to question 3 above based upon personal or job related considerations?

FREQUENCY entirely personal / 6 / 5 / 19 / 15 / 12 / entirely job related

Comments:

6. How will co-location affect your ability to achieve job related goals?

FREQUENCY strongly hinder / 2 / 3 / 20 / 20 / 14 / strongly enhance

Comments:

7. How will co-location affect the recognition you receive for your achievements?

FREQUENCY strongly hinder / 2 / 2 / 51 / 3 / 1 / strongly enhance

Comments:

8. How will co-location affect the quality (interesting, challenging) of work you will be assigned?

FREQUENCY greatly decrease / 3 / 1 / 43 / 9 / 3 / greatly increase

Comments:

9. How will the co-location affect your responsibilities or sense of responsibility?

FREQUENCY greatly decrease / 1 / 4 / 46 / 7 / 1 / greatly increase

Comments:

B

10. How do you rate your influence in job related areas?

no influence / 0 / 3 / 8 / 31 / 17 / very influential

Comments:

11. How much value do you place upon being influential?

no value / 1 / 1 / 6 / 23 / 28 / high value

Comments:

12. How will co-location affect your ability to influence decisions in job related areas?

FREQUENCY greatly hinder / 1 / 4 / 32 / 19 / 3 / greatly enhance

Comments:

C 13. How will co-location affect your chances to advancement?

FREQUENCY greatly weaken / 2 / 3 / 39 / 13 / 2 / greatly strengthen
strengthen

Comments:

D 14. At the present time how much of your immediate supervisor's job do you feel you could perform?

FREQUENCY none / 1 / 1 / 7 / 20 / 29 / all

Comments:

E 15. Will you seek employment outside NAVSHIPS/NAVSEC when co-located?

FREQUENCY YES NO (circle one)
10 45

Comments:

16. NAVSEC only. Will you try to change your residence after co-location?

FREQUENCY YES NO (circle one)
5 19

Comments:

17. Are there any specific personal or environmental problems associated with the co-location that are of major concern to you? If your answer is "yes" please list the major ones. (limit to five)

21 ANSWERED YES

- TRAFFIC CONGESTION
- PARKING
- COMMUTING TIME & DISTANCE
- POOR FACILITIES AT NATIONAL CENTRE
- FEAR OF RIFES

SEE CHAPTER V FOR GREATER DETAIL

F 18. How do you feel about the co-location?

FREQUENCY strongly disapprove 7 / 4 / 10 / 7 / 29 / strongly approve

Comments:

19. To what degree is your reply to question 18 based upon personal (parking, promotional opportunities, working with friends) versus job related considerations (perform better, greater access to information)?

FREQUENCY entirely personal 6 / 3 / 19 / 7 / 22 / entirely job related

Comments:

20. How much factual information (distinguish from rumors) do you have available to determine what problems or conditions will exist at co-location?

FREQUENCY uninformed 23 / 15 / 11 / 6 / 2 / fully informed

Comments:

I. Do you believe that the co-location will ever take place?

FREQUENCY YES NO (circle one)
48 4

Comments:

II. Do you believe that the results of this or any other questions could impact decisions on how the co-location will be executed or how the resulting organization will be managed?

FREQUENCY YES NO (circle one)
15 42

Comments:

III

GS 14-16 (30)

GS 12-13 (28)

Yours with Navy

2104
4105

Appendix 2

All questionnaires returned were reviewed in detail. The results were tabulated by the following categories:

<u>Grade</u>	<u>Years of Service</u>
GS-14 or above	≥ 10 yrs < 10 yrs
GS-13 or below (Journeyman Level)	≥ 10 yrs < 10 yrs
Total NAVSHIPS Responses	
Total NAVSEC Responses	
Total Responses	

Comments were recorded separately by question and response.

Associated questions had their responses compared.

The entire cumulated data tables are included on the following pages.

S = NAVSHIPS

N = NAVSEC

QUES. /

≥ GS 14 ≥ 10 yrs.

14S 1N / 7S 7N / 3N / 1S / /

≤ 10 yrs.

/ / 3S 1N / 1S 2N / / /

≤ GS 13 ≥ 10 yrs.

11S 1N / 4S / 1S 2N / 1S / 1S /

≤ 10 yrs.

11S 1N / 5S 2N / 1S 2N / 3S 1N / 1N /

UNIDENTIFIED

/ 1N / / / / /

TOTAL NAVSHIPS

16S / 19S / 3S / 5S / 1S /

TOTAL NAVSEC

14N / 10N / 9N / 1N / 1N /

TOTALS

110 / 29 / 12 / 6 / 2 /

CUMULATIVE

110 / 39 / 51 / 57 / 59 /

S = NAVSHIPS

N = NAVSEC

QUES. 2

≥ GS 14 ≥ 10 yrs.

/ 1N / 2N / 9S 3N / 15 5N / 2S /

≤ 10 yrs.

/ / 2N / 15 1N / 2S / 1S /

≤ GS 13 ≥ 10 yrs.

/ 2N / 1N / 4S / 4S / /

≤ 10 yrs.

/ / 15 2N / 8S 2N / 15 3N / /

UNIDENTIFIED

/ / / / / 1N /

TOTAL NAVSHIPS

/ / 15 / 22S / 8S / 3S /

TOTAL NAVSEC

/ 3N / 7N / 6N / 8N / 1N /

TOTALS

/ 3 / 8 / 28 / 16 / 4 /

CUMULATIVE

/ 3 / 11 / 39 / 55 / 59 /

S = NAVSHIPS

N = NAVSEC

QUES. 3

 \geq GS 14 \geq 10 yrs.1 1S 3N / 2N / 2S 3N / 9S 3N / \leq 10 yrs.1 IN / / / 1S IN / 3S IN / \leq GS 13 \geq 10 yrs.1 / IN / 1S / 1S / 6S / \leq 10 yrs.1 1S IN / 4S 2N / 1S IN / 4S 3N /

UNIDENTIFIED

1 / / / / IN /

TOTAL NAVSHIPS

1 2S / 5S / 5S / 22S /

TOTAL NAVSEC

1 IN / 5N / 4N / 5N / 8N /

TOTALS

1 1 / 7 / 9 / 10 / 30 /

CUMULATIVE

1 1 / 8 / 17 / 27 / 57 /

S = NAVSHIPS

N = NAVSEC

QUES. 4

≥ GS 14 ≥ 10 yrs.

1 1S 4N / 1S / 3N / 2S 2N / 8S 2N /

≤ 10 yrs.

1 / 1N / 1N / 1S / 3S 1N /

≤ GS 13 ≥ 10 yrs.

1 1N / 1S / 3S 1N / 4S /

≤ 10 yrs.

1 2N / 1S 1N / 2S / 4S 2N / 3S 2N /

UNIDENTIFIED

1 / 1N / / / /

TOTAL NAVSHIPS

1 1S / 2S / 3S / 10S / 18S /

TOTAL NAVSEC

1 7N / 3N / 4N / 6N / 5N /

TOTALS

1 8 / 5 / 7 / 16 / 23 /

CUMULATIVE

1 8 / 13 / 20 / 36 / 59 /

S = NAVSHIPS

N = NAVSEC

QUES. 5

≥ GS 14 ≥ 10 yrs.

1 N / 3S / 5SIN / 4N / 4S 5N /

≤ 10 yrs.

1 N / 1S2N / 2S / 1S /

≤ GS 13 ≥ 10 yrs.

1S IN / 3S / 3S / 1S /

≤ 10 yrs.

1S IN / 2N / 5S2N / 3S2N / 1S /

UNIDENTIFIED

1 / 1 / 1 / 1 N /

TOTAL NAVSHIPS

1 2S / 3S / 1S / 2S / 2S /

TOTAL NAVSEC

1 4N / 2N / 5N / 7N / 5N /

TOTALS

1 6 / 5 / 19 / 15 / 12 /

CUMULATIVE

1 6 / 11 / 30 / 45 / 57 /

S = NAVSHIPS

N = NAVSEC

QUES. 6

 \geq GS 14 \geq 10 yrs.1 IN / 16S2N/335N/ 3S 3N / \leq 10 yrs.1 / IN / IN / 2S IN / 2S / \leq GS 13 \geq 10 yrs.1 IN / IN / 3S / 3S / 2S IN / \leq 10 yrs.1 / IN / 533N/3S3N/ 2S /

UNIDENTIFIED

1 / / / / IN /

TOTAL NAVSHIPS

1 / 114S / 11S / 9S /

TOTAL NAVSEC

1 2N / 3N / 6N / 9N / 5N /

TOTALS

1 2 / 3 / 20 / 20 / 14 /

CUMULATIVE

1 2 / 5 / 25 / 45 / 59 /

S = NAVSHIPS

N = NAVSEC

QUES. 7

≥ GS 14 ≥ 10 yrs.

1 15 / 110510N 151N /

≤ 10 yrs.

1 / 1453N /

≤ GS 13 ≥ 10 yrs.

1 1N / 1752N 15 /

≤ 10 yrs.

1 / 11N 15 / 95W / 1 1N /

UNIDENTIFIED

1 / 1 / 11N /

TOTAL NAVSHIPS

1 15 / 15 / 13051 25 /

TOTAL NAVSEC

1 1N / 1 1N / 121N / 1N / 1N /

TOTALS

1 2 / 2 / 51 / 3 / 1 /

CUMULATIVE

1 2 / 4 / 51 / 3 / 1 /

S = NAVSHIPS

N = NAVSEC

QUES. 8

 \geq GS 14 \geq 10 yrs.1 15 1 1/25 7N/15 4N/ 1 \leq 10 yrs.1 1 1/35 3N/ 1 15 1 \leq GS 13 \geq 10 yrs.1 1N 1 1/65 1N/ 25 1 1N 1 \leq 10 yrs.1 1N 1 1N 1/95 4N/15 1N/ 1

UNIDENTIFIED

1 1 1 1 1 1N 1

TOTAL NAVSHIPS

1 15 1 1285 1 45 1 15 1

TOTAL NAVSEC

1 2N 1 1N 1/15N/ 5N/ 2N 1

TOTALS

1 3 1 1 1/43/ 9 1 3 1

CUMULATIVE

1 3 1 4 1/47/ 56 1 59 1

S = NAVSHIPS

N = NAVSEC

QUES.

9

 \geq GS 14 \geq 10 yrs.

/ 1S / 1N / 11S 7N / 3N / /

 \leq 10 yrs.

/ / / 2S 3N / 2S / /

 \leq GS 13 \geq 10 yrs.

/ / / 8S 3N / / /

 \leq 10 yrs.

/ / / 1S 2N / 8S 3N / 1S 1N / 1N /

UNIDENTIFIED

/ / / 1N / / /

TOTAL NAVSHIPS

/ 1S / 1S / 29S / 3S / /

TOTAL NAVSEC

/ / 3N / 17N / 4N / 1N /

TOTALS

/ 1 / 4 / 46 / 7 / 1 /

CUMULATIVE

/ 1 / 5 / 51 / 58 / 59 /

S = NAVSHIPS

N = NAVSEC

QUES. 10

 \geq GS 14 \geq 10 yrs.1 1S 1IN 16S 7N 53.3N 1 \leq 10 yrs.1 1 1 12S 1N 2S 2N 1 \leq GS 13 \geq 10 yrs.1 1S 11S 2N 1S 1N 2S 1 \leq 10 yrs.1 1S 12S 2N 53.5N 2S 1

UNIDENTIFIED

1 1 1 1 1 1N 1

TOTAL NAVSHIPS

1 1.3S 13S 17S 11S 1

TOTAL NAVSEC

1 1 15N 14N 6N 1

TOTALS

1 3 18 31 17 1

CUMULATIVE

10 3 11 42 59 1

S = NAVSHIPS

N = NAVSEC

QUES. //

 \geq GS 14 \geq 10 yrs.1 1 12S 13S 1N 7S 7N 1 \leq 10 yrs.1 1 1S 1 12S 3N 1S 1 \leq GS 13 \geq 10 yrs.1 1N 1 11S 1N 2S 15S 1N 1 \leq 10 yrs.1 1 12N 16S 3N 4S 2N 1

UNIDENTIFIED

1 1 1 1 1 1N 1

TOTAL NAVSHIPS

1 1 1S 13S 13S 17S 1

TOTAL NAVSEC

1 1N 1 13N 10N 11N 1

TOTALS

1 1 1 1 6 23 28 1

CUMULATIVE

1 1 2 18 31 59 1

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DEFENSE SYSTEMS MANAGEMENT SCHOOL FORT BELVOIR VA
RECOMBINING AND CO-LOCATING THE ENGINEERING SUPPORT PROJECT MAN--ETC(U)
NOV 73 M E STEINER

F/G 5/1

UNCLASSIFIED

NL

2 OF 2

AD
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END

DATE
FILMED
7-77

S = NAVSHIPS

N = NAVSEC

QUES. 12

 \geq GS 14 \geq 10 yrs.1 15 1 2N 1655N 354N 25 1 \leq 10 yrs.1 1 1252N 25 1 1N 1 \leq GS 13 \geq 10 yrs.1 1 152N 35 1N 1 \leq 10 yrs.1 1 151N 1654N 352N 1

UNIDENTIFIED

1 1 1 1 1N 1

TOTAL NAVSHIPS

1 15 1 15 115 115 1 25 1

TOTAL NAVSEC

1 1 3N 13N 8N 1 1N 1

TOTALS

1 1 1 4 132 19 1 3 1

CUMULATIVE

1 1 1 5 157 156 1 59 1

S = NAVSHIPS

N = NAVSEC

QUES. 13

≥ GS 14 ≥ 10 yrs.

1 1S 1 18S7N/3S4N/ 1

≤ 10 yrs.

1 1 12S3N/ 2S 1 1

≤ GS 13 ≥ 10 yrs.

1 1N 1 1S 15S2N 1S 1 1S 1

≤ 10 yrs.

1 1 1S 1N 19S2N/ 3N 1 1N 1

UNIDENTIFIED

1 1 1 1N 1 1 1

TOTAL NAVSHIPS

1 1S 1 2S 124S/ 6S 1 1S 1

TOTAL NAVSEC

1 1N 1 1N 16N/ 7N 1 1N 1

TOTALS

1 2 1 3 139/ 13 1 2 1

CUMULATIVE

1 2 1 5 144/ 57/ 59 1

S = NAVSHIPS

N = NAVSEC

QUES. 14

≥ GS 14 ≥ 10 yrs.

1 1 1 2S 16S 2N 4S 9N 1

≤ 10 yrs.

1 1N 1 1 2S 1 2S 2N 1

≤ GS 13 ≥ 10 yrs.

1 1 1S 1 1N 1 2S 1 4S 2N 1

≤ 10 yrs.

1 1 1 3S 1N 5S 2N 2S 4N 1

UNIDENTIFIED

1 1 1 1 1N 1

TOTAL NAVSHIPS

1 1 1S 1 5S 1 5S 1 12S 1

TOTAL NAVSEC

1 1N 1 1 2N 1 5N 1 27N 1

TOTALS

1 1 1 1 1 7 1 20 1 29 1

CUMULATIVE

1 1 1 2 1 9 1 29 1 58 1

S = NAVSHIPS

N = NAVSEC

QUES. 15

 \geq GS 14 \geq 10 yrs.15 Yes105 10 NO \leq 10 yrs.1N YES4 1N NO \geq GS 13 \geq 10 yrs.35 1N YES55 1N NO \leq 10 yrs.25 2N YES85 4N NO

UNIDENTIFIED

 YES1N NO

TOTAL NAVSHIPS

65 YES285 NO

TOTAL NAVSEC

4N YES17N NO

TOTALS

10 YES :45 NO

2 MAYBES

S = NAVSHIPS

N = NAVSEC

QUES. 16

≥ GS 14 ≥ 10 yrs.

1N Yes

10N NO

≤ 10 yrs.

____ YES

3N NO

≤ GS 13 ≥ 10 yrs.

3N YES

____ NO

≤ 10 yrs.

1N YES

5N NO

UNIDENTIFIED

____ YES

1N NO

TOTAL NAVSHIPS

____ YES

____ NO

TOTAL NAVSEC

5N YES

19N NO

TOTALS

5 YES

19 NO

S = NAVSHIPS

N = NAVSEC

QUES. 17

 \geq GS 14 \geq 10 yrs.35~~6~~N Yes8~~5~~N NO \leq 10 yrs.1~~5~~N YES3~~5~~2N NO \leq GS 13 \geq 10 yrs.2~~5~~1N YES6~~5~~2N NO \leq 10 yrs.2~~5~~5N YES8~~5~~1N NO

UNIDENTIFIED

 YES1~~1~~N NO

TOTAL NAVSHIPS

8~~5~~ YES2~~5~~5 NO

TOTAL NAVSEC

1~~3~~1N YES1~~1~~1N NO

TOTALS

2~~1~~ YES3~~6~~ NO

S = NAVSHIPS

N = NAVSEC

QUES. 18

 \geq GS 14 \geq 10 yrs.1 1N / 1 1N / 25.3N / 25.1N / 75.5N / \leq 10 yrs.1 1N / 1 1N / 1 4S 1N / \leq GS 13 \geq 10 yrs.1 2N / 1 1S / 1S / 6S 1N / \leq 10 yrs.1 3N / 2S 1N / 3S / 2S 1N / 3S 1N /

UNIDENTIFIED

1 / 1 / 1 / 1 / 1 1N /

TOTAL NAVSHIPS

1 / 2S / 6S / 5S / 20S /

TOTAL NAVSEC

1 7N / 2N / 4N / 2N / 9N /

TOTALS

1 7 / 4 / 10 / 7 / 29 /

CUMULATIVE

1 7 / 11 / 21 / 28 / 57 /

S = NAVSHIPS

N = NAVSEC

QUES. 19

 \geq GS 14 \geq 10 yrs.1 IN 1 IN 14S⁴N 13S IN 14S 4N 1 \leq 10 yrs.1 IN 1 1 IN 15 IN 3S 1 \leq GS 13 \geq 10 yrs.1 1 14S²N 15 13S IN 1 \leq 10 yrs.11S 3N 15 IN 13S IN 15S IN 1

UNIDENTIFIED

1 1 1 1 1 IN 1

TOTAL NAVSHIPS

1 1S 1 1S 11S 5S 15S 1

TOTAL NAVSEC

1 5N 2N 18N 2N 7N 1

TOTALS

1 6 1 3 19 7 22 1

CUMULATIVE

1 6 1 9 128 35 57 1

S = NAVSHIPS

N = NAVSEC

QUES. 20

 \geq GS 14 \geq 10 yrs.12S 5N / 5S 3N / 1S 2N / 3S / 1N / \leq 10 yrs.1 1N / 1S 1N / 1S 1N / 1S / 1S / \leq GS 13 \geq 10 yrs.1S 1N / 2S / 1S 2N / / / \leq 10 yrs.16S 3N / 1S 2N / 3S / 1N / /

UNIDENTIFIED

/ / / / 1N / /

TOTAL NAVSHIPS

1 13S / 9S / 6S / 4S / 1S /

TOTAL NAVSEC

1 10N / 6N / 5N / 2N / 1N /

TOTALS

1 23 / 15 / 11 / 6 / 2 /

CUMULATIVE

1 23 / 38 / 49 / 55 / 57 /

S = NAVSHIPS

N = NAVSEC

QUES. *I*

≥ GS 14 ≥ 10 yrs.

858N Yes152N NO

≤ 10 yrs.

353N YES15 NO

≤ GS 13 ≥ 10 yrs.

853N YES

____ NO

≤ 10 yrs.

935N YES

____ NO

UNIDENTIFIED

1N YES

____ NO

TOTAL NAVSHIPS

285 YES25 NO

TOTAL NAVSEC

20N YES2N NO

TOTALS

48 YES4 NO

S = NAVSHIPS

N = NAVSEC

QUES.

II

≥ GS 14 ≥ 10 yrs.

4S2N Yes7S9N NO

≤ 10 yrs.

1S1N YES3S2N NO

≤ GS 13 ≥ 10 yrs.

4S YES4S3N NO

≤ 10 yrs.

2S1N YES9S4N NO

UNIDENTIFIED

 YES1N NO

TOTAL NAVSHIPS

11S YES23S NO

TOTAL NAVSEC

4N YES19N NO

TOTALS

15 YES42 NO

Appendix 3

The following sample analysis using question 1 is included by way of an example in order for the reader to verify the statistical analysis. The arithmetic involved is simple enough to allow the reader to check any specific analysis.

The null hypothesis (H_0) is that there is no significant identifiable group opinion, i.e., that responses will be distributed evenly across all choices.

The hypothesis of test (H_1) is that there is a significant difference in choices (a group opinion) at the 99% confidence interval.

Example: Question 1 has five possible answers, therefore by H_0 each answer would receive $1/5$ of the responses.

∴ The cumulative frequency would be

1, 2, 3, 4, 5

the cumulative frequency ratio is $1/5, 2/5, 3/5, 4/5, 5/5$

the actual cumulative frequency is

10, 39, 51, 57, 59

the ratio is

$10/59, 39/59, 51/59, 57/59, 59/59$

the difference between the actual ratio and the null ratio is now calculated

$$\begin{array}{cccc} 100/590, & 390/590, & 510/590, & 570/590 \\ - 118/590, & - 236/590, & - 354/590, & - 472/590 \\ \hline - 18/590, & 154/590, & 156/590, & 98/590 \end{array}$$

the greatest difference is

$$156/590 = .264$$

Using table O, of Kraft and von Eeden.² (since the number of samples is greater than 40) look up $P = .01$ (99% confidence) from this we get $x = 1.63$

for $n > 40$ the area above $\sqrt{n} D_n = x^*$

$$\therefore D_n = \frac{x}{\sqrt{n}} = \frac{1.63}{\sqrt{59}} = .212$$

Since our greatest ratio is above this

$$.264 > .212$$

We reject H_0 , and accept H_1 .

Clarification or the correctness of the mathematics involved will not be discussed here.

Questions 5, 16, 17 were the only cases where the null hypothesis was not rejected.

In the cases of questions 15, 16, 17, I and II all responses were significant and no test really needed to be performed.

*if $n \leq 40$ then $\sqrt{n} D_n = x$ and table M is used.

Appendix 4

Unpublished Staff Paper

*SHIPS OIP
December, 1971*

Discussion Paper

Subject: Functional Cognizance of Ship Electronics

Summary:

Part I The Historical Perspective of NAVSEC Mission and Staffing

a. NAVSEC's mission is twofold: The Navy's center of engineering excellence for ship integration, and in-house executor of effort tasked by program managers.

b. Until February 1967, NAVSEC was charged with ship design integration through contract design at which time cognizance was formally transferred to the (former) Type Desk for construction and maintenance. With the advent of the SHAPM concept, the ship acquisition manager assumes cognizance of the ship from its conceptual stage through delivery to the Fleet, at which time the Ship Logistic Manager assumes cognizance for maintenance.

c. "Complex ships" require that engineering and management planning begin far earlier than with simpler ships; this is true for new construction, overhaul, alteration and conversion. This imposes added manpower in two ways: more, and for longer periods. PPBS was and is malfunctioning in its failure to match Headquarters manpower resources to these added requirements. As the Fleet population of complex ships has increased (both in absolute terms and in proportional terms), manpower requirements for NAVSHIPS and NAVSEC were similarly increased. Unable to program/fund these requirements in Headquarters, the Navy took the only alternative (non-support of programs was/is not an available alternative): the two-fold engineering support mission was converted to field status.

d. While the funding of DOD programs has declined, programs assigned to NAVSHIPS and NAVSEC have increased. The PPBS continues to be non-responsive to these changes. These anomalies have been recognized in the recent draft PBD which proposes to put NAVSEC under NIF accounting, such that available and funded workload more directly drives staffing.

Part II Electronics Organization of the Naval Material Command

a. Naval electronics emerged as a major ship engineering discipline in World War II. Establishment of a Bureau of Electronics was considered in the early 1950's and has been discussed periodically since. The evolution of electronics has continued; it is now an integral part of ship development and design, is a major factor in establishing ship costs, and is the dominant element of ship integration engineering.

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Part I The Historical Perspective of NAVSEC Mission and Staffing

- A. The Navy has sustained an in-house ship engineering capability since WW I. Through many evolutionary changes, this capability now resides in the Naval Ship Engineering Center (NAVSEC). While organizations have changed significantly, the basic mission of engineering support has retained an essentially dual characteristic.

1. NAVSEC (and its predecessors, hereafter simply 'NAVSEC') provides the Navy with a center of engineering excellence for Naval ship design and integration engineering. The importance and technology of ship integration engineering has steadily grown as Naval ships have advanced in complexity.

2. NAVSEC also serves as an in-house executor of engineering tasks assigned by program managers, whether directly from NAVSIPS headquarters or indirectly from other sources through NAVSIPS. The importance of in-house engineering task support has grown in direct response to demands for more ready response to the needs of a leaner fleet.

This technical in-house competence has served the Navy well. In WWII, the Korean conflict, and in recent blue-water and brown-water operations. Massive problems, which have emerged where such in-house technical competence is absent (e.g., B-36, TFX, C5A, F-15, Mk-48 torpedo) have by and large, not characterized Navy ship acquisition. The problems which exist are, on balance, minor and viewed against the fleet in being which is a tribute to the goals jointly pursued by the operating fleet and we who support it. This in-house competence should not be dealt with capriciously.

- B. Until 1967, NAVSEC was charged with ship design and integration through contract design. This included feasibility studies, concept formulation, preliminary design, and contract design. When a ship design was developed to the point where a commercial shipbuilder could produce a satisfactory vessel as specified, cognizance of the ship was formally transferred to the (former) Type Desk, which was responsible for its construction, test, evaluation, maintenance, and disposal. Reviews of the acquisition cycle disclosed several deficiencies in this arrangement. Our views of fleet support indicated that this function also could be improved if it were undiluted. In 1967, the Ship Acquisition Project Management (SHAPM) concept was instituted. Under this concept the project manager assumes cognizance of a ship from concept formulation, through construction and delivery to the fleet. At that time, cognizance of the ship is transferred to the Ship Logistic Manager, which retains ship engineering integration cognizance until the ship is inactivated or otherwise disposed of. Thus, the 'Type Desk' is responsible for managing the engineering integration of the fleet of today. The SHAPM manages the ship

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Integration of the fleet of tomorrow. NAVSEC continues to serve both in its dual - mission capacity. Because of the extremely close relationship of ship system-and-component design and procurement, and the advantages of such functions being executed in close liaison with ship engineering, NAVSEC has executed these functions as well.

- C. Engineering and management planning for complex ships is more intense and must begin far earlier with complex ships than with simpler ships. This is true for new construction, conversion, alteration, and overhaul. Thus, the manpower support requirements for complex ships are increased two ways: more, and for a longer periods of time. As the fleet population of complex ships has grown (in both absolute and proportional terms), manpower requirements for both NAVSEC and NAVSHIPS were similarly increased. Repeated attempts to apply the Planning, Programming, and Budgeting System (PPBS) to these requirements have failed. The requirements were recognized as early as FY 1966 when a PBD recognized that projected program growth would generate a NAVSEC workload in excess of 4,000 people in the present time frame. Program projections have in fact evolved as predicted, but the PPBS was and is malfunctioning in its failure to match programs authorized for execution with manpower necessary to execute those programs.

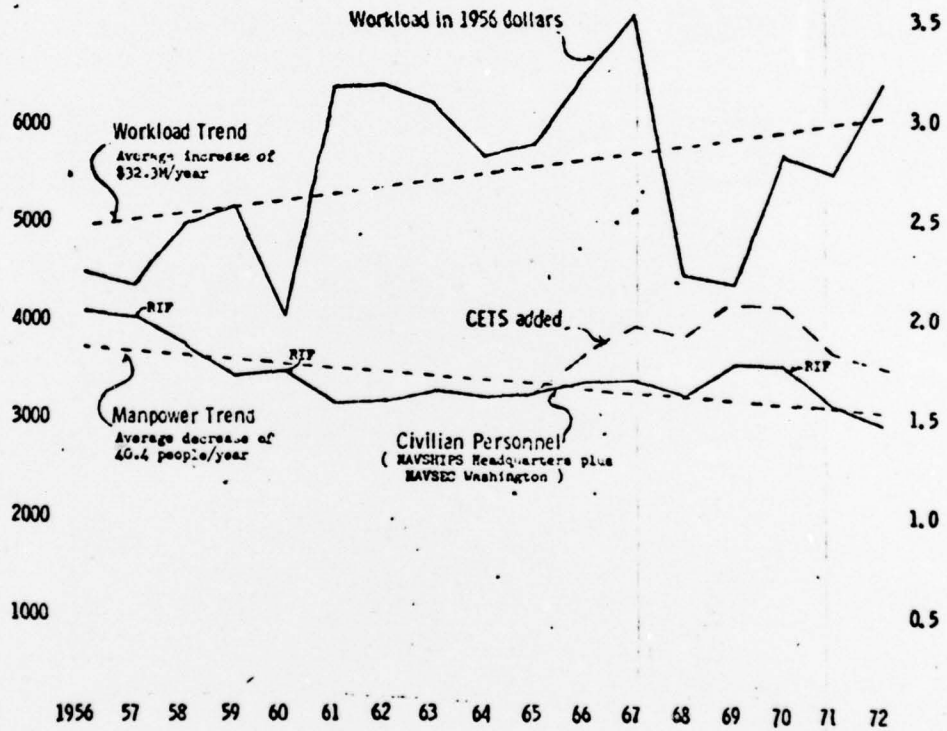
Unable to program/fund these requirements in headquarters, and non-support of programs not being an available alternative, the Navy took the only remaining course of action. The twofold engineering support mission was converted to field activity status. In FY 1966, NAVSHIPS, with internal Navy support, split engineering support off from headquarters (where augmentation was not permitted) and formed a local activity with field status (where more staffing flexibility existed). (Subsequent to this action, reorganization at the CNO/CNM level has resulted in SYSCOM "headquarters" offices being designated as field echelons. The PPBS continued to control SYSCOM "headquarters" as before, however. This issue has been a matter of correspondence and discussion by the Navy and OSD Secretarial staffs.) As displayed in this chart, NAVSHIPS/NAVSEC in combination are at the end of a 15-year trend during which workload (as measured in constant 1956 dollars of Total Obligational Authority) is rising at an average annual rate of \$32 million while civilian manpower is declining at an average annual rate of 40 people.

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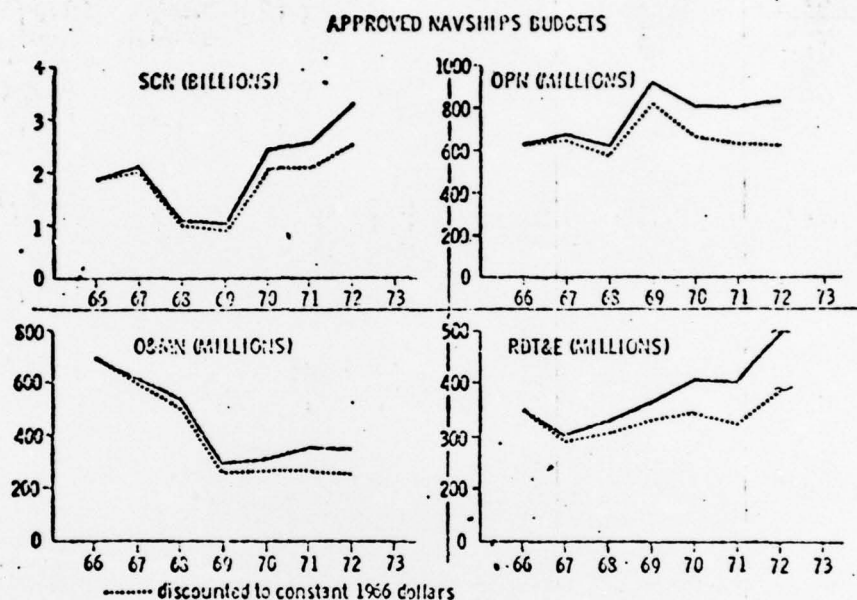
Civilian
Personnel

NAVSHIPS TOA/MANPOWER CHART

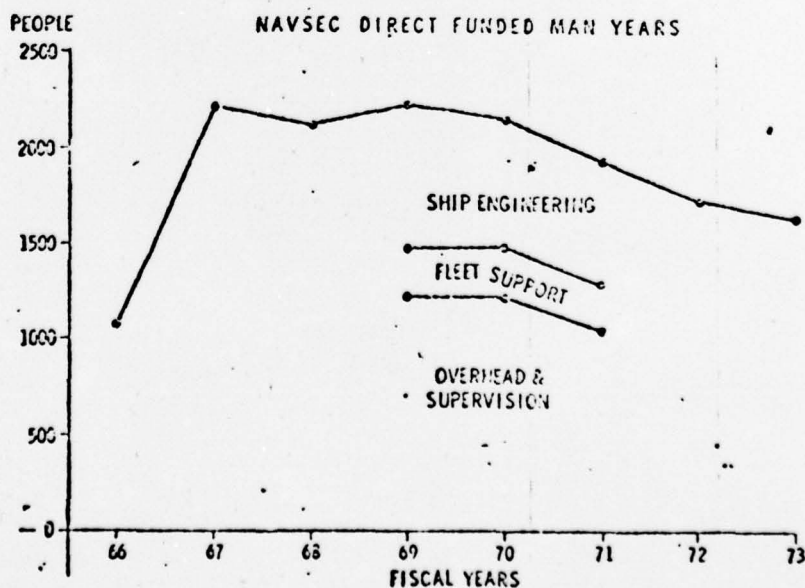
TOA
\$B



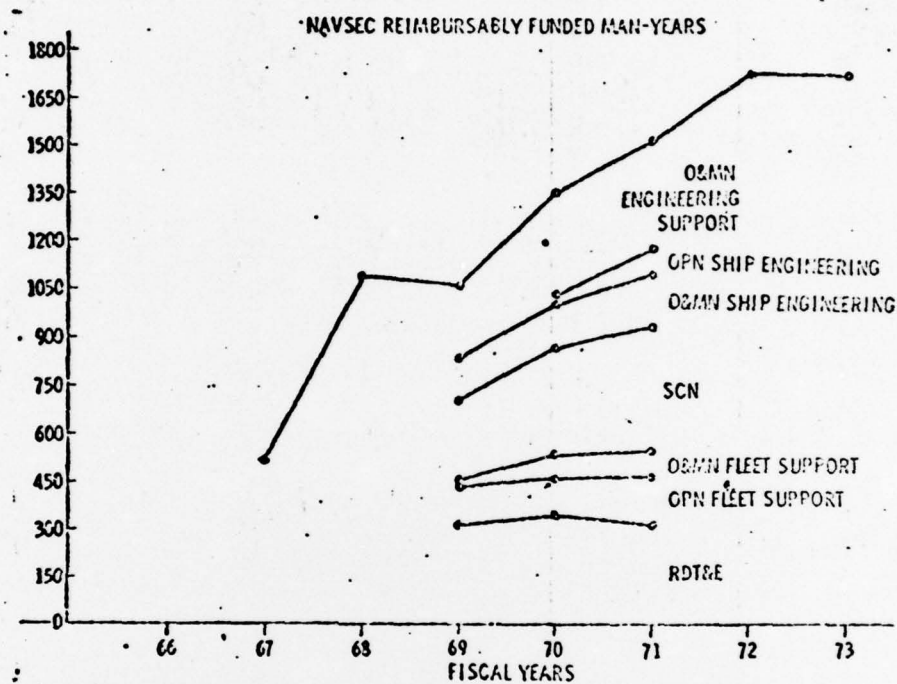
- D. While the funding of Defense programs has declined in recent years, programs assigned to NAVSHIPS and NAVSEC have increased significantly as displayed in these charts.



In response to these changes, NAVSEC's direct-funded effort is declining.



However, NAVSEC's program funded reimbursable effort has increased significantly.



Program managers have increased authorized funds to support acquisition of engineering services. They're free to go elsewhere, but many go to NAVSEC. NAVSEC averages a 28-day response time, whereas procuring engineering services under contract often takes months. In addition to responsiveness, the quality of NAVSEC engineering support is high. For example, in a recent commendatory letter, the CNO stated that the PF design study "exemplified the type of work my staff and I have come to expect from your command."

The above analysis has been repeatedly and independently verified:

- 1966 - PCD approved 4,000+ for NAVSEC "within total Navy manpower."
- 1969 - SCN study identified chronic understaffing as problem source.
- 1970 - House Appropriations Committee approved 2,028 for NAVSHIPS Hq. for FY 1971. Authorized: 1,737 for FY 1971, 1,640 for FY 1972.
- 1971 - OCMH agreed to support NAVSEC employment above budget level.

- 1971 - OSD In draft PBD (not yet formalized) recommends NIF accounting for NAVSEC to permit program funds to drive staffing.

Faced with such a posture, NAVSHIPS has migrated selected headquarters functions to NAVSEC ceiling:

- 1966 - 112 CETS sonar employees
 - 1970 - 173 CNM directed (mostly sonar)
 - 1971 - 162 Professional trainees plus rest of sonar
 - 1972 - 12 CNM directed (PM-2)
- 459

E. Many self-help efforts contribute to solutions, but plain human effort is not substitutable.

- SHAPMs now control SCN.
- Project Directives system controls tasks & expenditures.
- Priority system aids in resource allocation.
- Zero-based O&M,N budgeting aids in program and task selection.
- Project Improve } direct action/effort to
- Course & Speed } management objectives.

The cost of not staffing cannot be avoided - the need will return in another form: i.e., claims; 1200 PSI system.

4. NAVORD was established to provide a Navy center of expertise for weapons technology, but with the clear understanding that its systems must be integrated into the ship by NAVSHIPS.

5. The integration of the whole ship increasingly became a dominant function assigned to NAVSHIPS. COMNAVSHIPS has responsibility for the SCN appropriation and for speaking for the Navy to the ship-building industry and to Congress.

By 1968 the stresses and strains of the new NMC organization had become evident. Disagreement regarding shipboard electronics developed in a series of flag meetings to review the SYSCOM charters. NAVORD strongly urged the transfer of sonar, radar and NTDS to its cognizance. NAVELEX supported NAVSHIPS in the need to have single system control over electronics shipboard systems, such control then and now in the NAVSHIPS Charter.

By 1971, NMC Organization Review under RADM Rapp discovered certain basic problems in the area of the organization of electronics. Integration of ships involved ever-increasing interfaces among NAVSHIPS, NAVELEX and NAVORD, and NAVSHIPS responsibility to integrate ship combat systems was being questioned increasingly. The need for stronger authority and accountability for a single executive in charge of this total ship was clear, as technical and ship cost problems grew ever more complex. Technical trends were driving electronics closer together with other ship environmental factors, including hull structure (e.g., sonar, antennas), total weapons systems, ship spectrum, etc. At the same time, enemy threats requiring improved combat system reaction time dictated a closer functional relationship.

B. The Rapp Committee "NAVSHOE" Recommendations

The proposal to combine SHIPS, ORD and ELEX into a single command resulted from the recognition of the need to integrate ships more fully; the difficulty of holding one executive responsible under the present system with major interfaces created in ship design; the absolute need to reduce manpower over the predictable future.

The NAVSHOE" proposal seeks to accomplish two major objectives in the electronics area: unite all ship electronics with other ship systems; and place overall review and direction of electronic policy and standardization at the NAVMAT staff level under a flag officer, divested of resources, so that he would not compete with the SYSCOMS in hardware development.

C. What Would Be the Effects of Putting All Electronics Into NAVELEX?

1. Advantages

- a. single executive accountable for both policy and hardware development;
- b. competition between electronics engineering organizations would be eliminated;

c. development of common hardware would be facilitated.

2. Disadvantages:

- a. the weakness of the present system, i.e., SYSCOM interfaces, would be increased, since integration of the combat system would be no longer possible by NAVSHIPS and NAVORD would have to jointly put together the combat system with NAVELEX, with reference to NAVSHIPS for other ship considerations.
- b. NAVAIR and NAVSHIPS would continue to be held responsible for platform integration, but both would lose certain functions they now control, with NAVAIR losing its present advantage as a total platform entity. (Obviously, the principle of transferring all ship electronics would also apply to NAVAIR).
- c. The concept of uniting ordnance and ship systems would be difficult to implement. In effect, the basic premise of NAVSHOE would be vitiated, and potentially more effective total ships and eventual manpower savings from the SHOE combination would be lost.
- d. The NAVMAT staff would have to take on increased functions of resolving ship problems and this would require increased review and layering at the NAVMAT level.
- e. Removing the electronic engineering influence from within the NAVSHIPS organization will inevitably weaken the ship design produced by naval architects and marine engineers, and reverse a trend to integrate different engineering viewpoints in the design process.

D. Conclusions

In spite of its attractiveness from an electronic viewpoint alone, the consolidation of electronic functions within a single command is less satisfactory in practice than the present way of doing business, with all its weaknesses, since it lessens the chances of both effective ship combat system and total ship system integration.

The advantages of the NAVSHOE proposal are believed to offer the greatest potential for improvement. The present system, if retained, can be further strengthened by reemphasizing collocation efforts at NAVSEC between SYSCOM engineering staffs.

Appendix 5

12/13/5
Written for HADOM Brockett's speech to the 7th main conference 12/15/5

NAVAL SHIP ENGINEERING CENTER

For more than a year now, the Bureau of Ships has been planning for a significant decentralization of major functions to the field service. Implementation of these plans is taking shape in the form of the new Naval Ship Engineering Center (NAVSEC), a recently established BUSHIPS field activity.

Decentralization is the process of assigning functions now performed by the Headquarters to a field activity, either existing or new. In some cases, decentralization has meant a reassignment of functions from Headquarters to field, without an accompanying reassignment of personnel. However, in most cases decentralization has involved reassignment of both functions and personnel; this is the case in the establishment of the NAVSEC. Incidentally, decentralization does not necessarily include relocation. It is possible to call a function and the organization which performs it as field in nature without moving the organization a foot; on the other hand, it is possible to relocate a Headquarters unit from one town to another without changing its Headquarters status. In the case of NAVSEC, decentralization at the present does not include physical relocation, although we are giving serious consideration to the possibility of acquiring facilities in the Washington area for our NAVSEC people which are better than those currently available to them in the old Main Navy-Munitions complex.

Pressures on the Bureau to undertake major decentralization actions have stemmed from two sources: Rigid limitations on Headquarters ceiling, and

the size of the Navy's Headquarters organization as compared to the Headquarters of the other two services. On 3 April 1963, RADM James, then Chief of the Bureau, addressed an urgent request to the Secretary of the Navy for an increase in BUSHIPS ceiling. This request was responded to by the Under Secretary of the Navy in a Memorandum addressed to the Chief of Naval Material; in this Memo, the Under Secretary called attention to serious restrictions placed on Departmental Headquarters ceiling, and recommended that ceiling problems be solved by major transfers of functions from the Headquarters to the field service. In this way, functions thus reassigned, by being staffed from within field ceiling, could enjoy the much greater flexibility in distributing resources which is available to manage within total world-wide field ceiling. At the same time, SECDEF and SECNAV became concerned at the disparity between Navy Headquarters and the Headquarters of the other two services; at that time the size of the Navy Headquarters was almost twice the size of Army Headquarters. A policy was therefore established to reduce the size of Navy Headquarters by reassigning functions from Headquarters to field.

In October of last year, acting within the guidance thus provided by the Secretariat, the Chief of Naval Material called upon his four Bureaus to propose functions which could be declared as field in nature and thus transferred from the Headquarters. In the same month, BUSHIPS replied by recommending the transfer to the field of significant technical and engineering functions to a new activity to be created for this purpose, called the Naval Ship Engineering Support Activity (NAVSESA). This recommendation was approved in principle by the CMM in December. Having been

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directed to proceed with implementation, I requested the Chief of Naval Operations to establish the new NAVSESA, and directed RADM Jack Fee to proceed with detailed planning. The new NAVSESA field activity was established by SECNAV in July of 1965. In order to give the activity a name which better describes its functions and importance, SECNAV last month approved a change in the title from NAVSESA to Naval Ship Engineering Center (NAVSEC), which is now the official name of the activity.

The NAVSEC, when fully established, will represent a consolidation of the Bureau's technical and engineering capability, together with the inventory management functions necessary to support this capability. The new field activity will consist of the present Ships Design Division and the old Technical Logistics Divisions; for those of you familiar with the BUSHIPS phone book, this is a combination of Codes 410 and 600. The field activity is designed to be a responsive one; that is, one which performs the functions of ship design and system and equipment development, design, engineering, procurement and inventory support, in response to requirements laid on it by the program and project managers who remain in the Headquarters. The field activity will consist of three major organizational groupings:

- (1) Acquisition Management Department, which will be responsible to manage the acquisition of critical systems and equipments from initial design through to delivery to the Fleet;

- (2) Design and Engineering Department, which will contain our Naval architects and ship and system engineers; it is in this Department that the Bureau's fundamental design and engineering functions will be performed; and

(3) Ships Material Department, which will provide inventory management and support functions to our engineering codes and to the Bureau's program and project managers.

NAVSEC will design and procure most F&S cognizance equipments, under the management of the Headquarters. Some items such as nuclear components, sonar equipments, small boats and landing craft and periscopes will continue to be designed and procured by program and project managers in the Headquarters. We are working with BUSANDA to realign cognizance symbols for equipments so as to be able to differentiate clearly between those which are managed in BUSHIPS Headquarters and those which are managed by NAVSEC for the Headquarters. Separate MILSTRIP and communication routing identifiers may be assigned to NAVSEC. In the interim, until specific instructions are issued, AUTODIN traffic, messages, letters and telephone calls in regard to equipments and material should continue to be addressed as in the past.

As I mentioned before, NAVSESA, now NAVSEC, was established in July of this year. The first increment of functions and personnel - comprising most of the old Technical Logistics Divisions - was transferred to NAVSEC on 7 November 1965; the majority of the Ship Design Division will be transferred on 19 December. Remaining ship design and technical logistics personnel will be phased into NAVSEC, together with their functions, starting in January 1966. We hope to have all functions and personnel scheduled for reassignment actually in NAVSEC by the end of the third quarter of this fiscal year; we plan to have the new NAVSEC internal organization fully

operational by May of 1966. We are also planning to bring the Electronics Maintenance Engineering Center at Norfolk and the NBTL/Machinery Maintenance Engineering complex in Philadelphia into NAVSEC as "field offices" by next summer. However, their mission of providing engineering assistance to the Fleets for assigned equipments will not change.

NAVSEC had its genesis in pressures to decentralize. However, it should not be thought that NAVSEC represents no more than a "change in the name of Arkansas." I wish to emphasize that we mean to have this a real field activity, and a highly effective one. I believe that a consolidation of the ship, system, and equipment design, engineering, and technical support functions into one integrated organization with a single commander will represent a quantum improvement in our capability to respond to your needs.

